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# **Categorical Use Attainability Analysis for Recreation**

## **Response to Comments for Comment Period Ending March 14, 2014**

August 2014

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## 1.0 SUMMARY

The State of Wyoming has two designations for recreational use of surface waters: primary contact recreation and secondary contact recreation. Primary contact recreation waters are those where recreational activities would be expected to result in immersion in or ingestion of the water. Secondary contact recreation waters are those where contact with water is expected to be either incidental or accidental and not result in either immersion in or ingestion of the water. During the 2007 revision of Wyoming's Surface Water Quality Standards, waters not listed in Table A of the Wyoming Surface Water Classification List were designated for secondary contact recreation. These designations were disapproved by the United States Environmental Protection Agency (EPA) because a use attainability analysis (UAA) had not been completed to show that primary contact recreation was not an existing or attainable use.

Wyoming is the third driest and least populous state in the U.S. As a result, Wyoming has thousands of miles of streams where primary contact recreation is not an attainable or existing use because there is not enough water to support immersion (full body contact) activities and there is little potential for children or other members of the public to ingest small quantities of water from the stream because the stream is not located near recreation sites or areas frequented by children or the public. To determine which streams in the state do not support primary contact recreation and where primary contact recreation is not an existing use, the Wyoming Department of Environmental Quality, Water Quality Division (WDEQ/WQD) developed a categorical UAA using Geographic Information Systems (GIS), over 850 field verification sites and public feedback.

On August 6, 2013, the *Draft Categorical Use Attainability Analysis for Recreation* was released through a public notice. In addition, a web map was made available to display proposed primary and secondary contact recreation designations for 100k streams along with the datasets that were used in the analysis. The UAA identified streams with mean annual flows less than 6 cfs as those that lack sufficient flow to support primary contact recreation (i.e., ephemeral, small intermittent and small perennial streams). These low flow streams were designated for secondary contact recreation, unless they occurred in areas frequented by children and/or the public. Data layers representing populated places, schools, campgrounds, recreation sites, natural areas, rest areas, National Parks and Recreation Areas, State Parks and Historic Sites, and Wildlife Habitat Management Areas were used to identify low flow streams that may be used for primary contact recreation. Other primary contact recreation streams were identified by assigning weights to streams segments based on distances from campgrounds, recreation sites, natural areas, rest areas, National Parks and Recreation Areas, State Parks and Historic Sites, Wildlife Habitat Management Areas, trailheads, dispersed campsites, roads, trails, and whether the stream was located on public land. Stream segments designated for primary contact recreation were extended to the nearest terminus, tributary, or nearest primary segment to minimize the occurrence of short, isolated reaches.

The August 6, 2013 public notice outlined that the state needed assistance from the public to identify streams within Wyoming that are used for primary contact recreation that were not identified as primary in the draft UAA. The public notice specifically identified areas such as pools or other deep water areas that may occur on low flow streams that may be used for primary contact recreation.

WDEQ/WQD also requested assistance in identifying any potential issues with the datasets used in the draft UAA.

During the comment period that ended September 30, 2013, WDEQ/WQD did not receive any comments that indicated the presence of pools or other deep water areas on “low flow” streams that were used or have been used for primary contact recreation. WDEQ/WQD did receive comments indicating that the access datasets were designating too many dry draws and gullies (i.e., low flow streams) for primary contact recreation that were not used for nor have the potential to be used for primary contact recreation. Based on this feedback, WDEQ/WQD removed the 1.0 mile and 2.0 mile weighted buffers around established recreation sites, trailheads and dispersed campsites. WDEQ/WQD also received comments that the extension process was capturing too many “low flow” streams that were not used for primary contact recreation. Based on these comments, WDEQ/WQD modified the extension process to only include isolated secondary segments and braided channels. WDEQ/WQD also received comments that site-specific flow information and/or site-specific UAAs that were submitted to WDEQ should be incorporated into the *Categorical UAA for Recreation*. Based on this feedback, WDEQ/WQD incorporated USGS flow data and other site-specific flow data into the Categorical UAA where it was available. WDEQ/WQD also received comments about whether BLM recreation sites were captured in the *Categorical UAA for Recreation* and some questions about whether some of the “natural areas” that were included in the draft UAA were actually recreation sites. Based on these comments, BLM recreation sites (i.e., campgrounds, trailheads, recreation areas and dispersed campsites) were added to the UAA and two natural areas that were not established recreation sites were removed. Additionally, “pipelines” identified in the NHD dataset were removed, as these are not surface waters.

On January 28, 2014, WDEQ/WQD released a revised version of the *Categorical UAA for Recreation* for a 45-day public comment period that ended on March 14, 2014. In addition, a web map was made available to display the proposed primary and secondary contact recreation designations for 100k streams and data sets used in the analysis. WDEQ made two changes to the UAA following the end of the March 14, 2014 comment period. The first change was a slight modification to the county boundaries based on data obtained from the Wyoming Department of Revenue. The second change was to apply the UAA to all waters within the exterior boundary of the State of Wyoming due to questions regarding which waters do and don’t fall within Indian Country. These changes resulted in small changes to the percentages of 100k streams designated for primary and secondary contact recreation.

The following response to comments addresses comments that were received during the January 28 to March 14, 2014 comment period. The full text of the comments received during the comment period can be found in Appendix A.



## 2.0 COMMENTERS

Wyoming Association of Conservation Districts  
United States Environmental Protection Agency, Region 8  
United States Department of Agriculture, Rocky Mountain Region  
Peabody Energy  
Western Watersheds Project  
Niobrara Conservation District

## 3.0 COMMENTS AND RESPONSES

### 3.1 General Comments

**Entity:** Wyoming Association of Conservation Districts

**Comment:** “The Wyoming Association of Conservation Districts appreciates the opportunity to provide comment and input on the above referenced Categorical Use Attainability Analysis for Recreation. WACD supports and encourages the approval of this model in a timely fashion. Based on feedback from local districts and review by the Watershed Coordinators, this categorical UAA will result in much higher accuracy for recreational designated uses. WACD believes there will be isolated incidents where a more thorough site specific UAA may be necessary however this will be limited.”

**Response:** WDEQ/WQD appreciates WACD’s support and assistance with development of the *Categorical UAA for Recreation*. WDEQ/WQD agrees that additional recreation UAAs will likely need to occur on a site-specific basis. WDEQ/WQD is encouraged that this may be on a limited basis, as this indicates that the UAA is meeting its objective of accurately designating waters for primary or secondary contact recreation and reducing the number of site-specific UAAs that will need to be conducted.

**Entity:** Wyoming Association of Conservation Districts

**Comment:** “Again, WDEQ should be commended for this effort. We look forward to continue to work with DEQ on the mutual goal of maintaining and improving Wyoming’s watershed health. This effort will ensure that the time, energy and resources are spent in an appropriate manner to protect the human health of Wyoming’s citizens.”

**Response:** As mentioned above, WDEQ appreciates WACD’s support and assistance with this project.

**Entity:** United States Environmental Protection Agency, Region 8

**Comment:** “The U.S. Environmental Protection Agency (EPA) has reviewed the Wyoming Department of Environmental Quality’s (WDEQ) January 28, 2014 public notice of the “Categorical Use Attainability Analysis for Recreation” and “Response to Comments for Comment Period Ending September 30, 2013.” The UAA uses Geographic Information System (GIS) data to identify streams with insufficient flow to attain a primary contact

recreation use. In general, the EPA's preliminary thinking is that WDEQ's approach would be consistent with 40 CFR § 131.10(g)(2). We appreciate the efforts of WDEQ to address our comments throughout this project. We note that the EPA administers the Clean Water Act (CWA) in Indian country as defined at 18 U.S.C. 1151, which includes all lands, regardless of ownership, within the exterior boundaries of the Wind River Indian Reservation. Therefore, our comments below refer to waters located outside of the Wind River Indian Reservation.

The EPA regulations at 40 CFR part 131 interprets and implements CWA section 101(a)(2) and 303(c)(2)(A) to require that the uses specified in section 101(a)(2) of the CWA, which includes "recreation in and on the water," are presumed attainable unless a state or tribe affirmatively demonstrates through a UAA that the use is not attainable as provided by one of the six factors at 40 CFR § 131.10(g). To support an attainability decision under 131.10(g), the EPA's suggested approach is for states to also consider a suite of factors, such as actual use, existing water quality, water quality potential, access, recreational facilities, location, safety considerations, and physical conditions.

Consistent with 40 CFR § 131.10(g)(2), the scope of the UAA is limited to low flow streams (mean annual flow < 6 cubic feet/second). The UAA concludes that of Wyoming's 112,890 stream miles, 92,712 stream miles (82%) do not have sufficient flow to support primary contact recreation. This is not surprising, considering Wyoming is the third driest state in the nation. However, consistent with the EPA's "suite of factors" guidance, Wyoming also developed an innovative approach using GIS data layers representing populated places, schools, and recreation areas to determine if there were streams that should be protected for primary contact recreation despite low flow, in order to protect Wyoming's residents, and in particular, its children, from gastrointestinal illness. Although Wyoming is the least populous state in the United States, almost 7,000 miles of low flow streams are proposed for primary contact recreation based on this analysis.

The UAA incorporates an appropriate level of conservatism for a state-wide approach. In addition, the site-specific UAA process will remain a tool for the state to refine recreational uses over time. This refinement of designated uses is an integral part of any state water quality program. However, the EPA recognizes that Wyoming's UAA approach may not be appropriate in all parts of the United States considering our hydrologic diversity.

In summary, the EPA's preliminary thinking is that WDEQ's draft approach for identifying streams with insufficient flow to support a primary contact recreation use would be consistent with 40 CFR § 131.10(g)(2). The EPA will consider the public comments and the final submission of the state prior to making a final decision under CWA § 303(c)."

**Response:** WDEQ appreciates EPA's preliminary support of Wyoming's *Categorical UAA for Recreation* and the approach used by WDEQ to identify streams in the state that do

not support and are not used for primary contact recreation.

WDEQ has worked closely with EPA during development of the *Categorical UAA for Recreation* and has made a concerted effort to incorporate EPA's feedback and address EPA's concerns during development and revision of the UAA. As such, WDEQ anticipates a timely approval of the final UAA and secondary contact recreation use designations.

**Entity:** **USDA Forest Service, Rocky Mountain Region**

**Comment:** "The U.S. Forest Service supports the effort of Wyoming Department of Environmental Quality (WDEQ) to appropriately classify waterbodies on National Forest System (NFS) lands in Wyoming for recreation uses. We recognize this task has taken many years to complete and are pleased to see it coming to fruition. WDEQ invited us to participate in the development of the Use Attainability Analysis from the beginning. We appreciate the cooperative spirit and your willingness to address our issues and concerns throughout the process.

Our policy is to protect all designated uses of water, including recreation uses, in waterbodies on NFS lands. However, the designated use should be consistent with the actual or potential use of the waterbody. We supported the shift from a single recreation use designation in the Wyoming Water Quality Rules and Regulations (Chapter 1) where all waters were managed for primary contact recreation to a system where certain waters are managed for primary contact recreation and the remaining waters are managed for secondary contact recreation. We felt this was important because it recognizes the different human health risks associated with the different types of waters and recreational uses in the State. The proposed changes in recreation use designation described in this "Categorical Use Attainability Analysis for Recreation" will help us to better manage water quality for protection of recreational use by focusing available resources to those locations where primary contact recreation use is actually occurring or can potentially occur."

**Response:** WDEQ/WQD appreciates the USFS's support and assistance with development of the *Categorical UAA for Recreation*. WDEQ/WQD received valuable data sets and feedback from the USFS during development and revision of the UAA. The UAA is a much better product as a result of this collaboration.

**Entity:** **Peabody Energy**

**Comment:** "Peabody Energy appreciates the chance to comment on the Categorical Use Attainability Analysis for Recreation. Peabody Energy operates four active coal mines in Campbell and Converse Counties and maintains a closed mine site near Hanna. Peabody Energy compliments the WDEQ/WQD for the improved document utilizing discrete criteria for determining accessibility to streams and use of available flow data rather than National Hydrologic Dataset flow estimates. Peabody Energy considers the revised document much more representative of the streams in Wyoming where our mines are located than the draft document published in 2013.

Peabody also encourages WDEQ/WQD to periodically review and updated the web map as more information is gathered through the state and individual UAA's are developed."

**Response:** WDEQ/WQD appreciates Peabody Energy's support of the revised *Categorical Use Attainability Analysis for Recreation* and participation in the public process during development and revision of the UAA. The UAA is a stronger product due to the feedback provided by Peabody Energy during the public process.

**Entity:** **Niobrara Conservation District**

**Comment:** "The Niobrara Conservation District (NCD) would like to thank the WDEQ for all the effort that has been put into the development of this UAA. It is a great improvement to the previous system of classification particularly in this low flow region. We appreciate the opportunity to comment and further the accuracy of this document. To that end we have some comments about some individual classifications."

**Response:** WDEQ/WQD appreciates NCD's support for the Categorical UAA for Recreation. WDEQ/WQD addresses the comments on individual classifications later in this document.

### 3.2 Surveys

**Entity:** **Wyoming Association of Conservation Districts**

**Comment:** *'There was 93.4% agreement between the primary surveys before extensions and 94.4% agreement after extensions; there was 80.5% agreement between all the surveys and the UAA before extensions and 79.9% agreement after extensions. Of Wyoming's 112,890 stream miles depicted in the 1:100,000 National Hydrography Dataset (NHD), 85,727 miles or 75.9%, do not support primary contact recreation.'*

*"WACD commends WDEQ for verifying all available data and double checking the accuracy to reach the best agreement percentage possible and stands behind the overall agreement before extensions of 80.5% and after extensions of 79.0% between the two sets of surveys."*

**Response:** WDEQ appreciates WACD's assistance in facilitating the collection of over 700 field surveys that were used to validate the UAA. WDEQ also appreciates WACD's efforts to verify the survey results. WDEQ recognizes that these were major efforts and that significant resources were spent to obtain and verify these data. The surveys were extremely valuable to development of the *Categorical UAA for Recreation* through its multiple iterations and have resulted in a much stronger UAA.

### 3.3 Public Process

**Entity:** Wyoming Association of Conservation Districts

**Comment:** *'Public feedback focused on whether primary contact recreation is an existing use in areas other than those identified in steps one and two. These areas included any pools, deep water areas, or other sites located on 'low flow' streams not identified in one of the GIS datasets. Based on the feedback received during the August 6 to September 30, 2013 public comment period, there are not any pools or deep water areas located on 'low flow' streams that are used for primary contact recreation that are not designated for primary contact recreation in the UAA.'*

"WACD appreciates the opportunity DEQ afforded to provide additional information pertaining to pools, deep water areas or other areas. WACD would concur that the lack of submittal of these type of identified areas on low flow systems is consistent with the hydrology of these types of intermittent and ephemeral drainages and draws."

**Response:** WDEQ appreciates WACD's support of this approach for identifying whether primary contact recreation is an existing use on low flow streams proposed for secondary contact recreation.

**Entity:** Western Watersheds Project

**Comment:** "In the DEQ's categorical UAA document it states 'In the third step, the UAA incorporates public feedback received during the August 6 to September 30, 2013 public comment period. Public feedback focused on whether primary contact recreation is an existing use in areas other than those identified in steps one and two. These areas included any pools, deep water areas, or other sites located on 'low flow' streams not identified in one of the GIS datasets. Based on the feedback received during the August 6 to September 30, 2013 public comment period, there are not any pools or deep water areas located on 'low flow' streams that are used for primary contact recreation that are not designated for primary contact recreation in the UAA.'

The DEQ sent out a notice to maybe a few hundred people at most, nearly all of whom support the categorical downgrade and yet that lack of 'feedback' from those few people is forming the basis for their decision-making. So the DEQ is using the absence of evidence as evidence of absence, which clearly is not a valid assumption on which this rule making can be based."

**Response:** WDEQ/WQD followed all rules, policies and procedures when soliciting public comment for the *Categorical UAA for Recreation*. WDEQ/WQD also conducted additional public outreach through a public meeting and media interviews. WDEQ/WQD sent the public notices to any and all interested parties via list-serve and published the public notices in a newspaper of statewide circulation. The public notices were also posted on WDEQ's website in multiple locations. Included in the August 2013 public notice was announcement of a public meeting and the option for members of the public to request additional public meetings upon request. DEQ/WQD

gave a webinar to Conservation District employees regarding the UAA in August 2013 and gave presentations at all five of the Wyoming Association of Conservation District's fall regional meetings in September 2013.

WDEQ/WQD also conducted interviews with media outlets regarding the *Categorical UAA for Recreation* (Wyoming Public Radio and The Pinedale Roundup) during the 2014 comment period. According to Wyoming Public Radio's website<sup>1</sup>, Wyoming Public Radio broadcasts to over 90% of Wyoming, including the communities of Laramie, Casper, Cheyenne, Rock Springs, Green River, Evanston, Jackson, Lander, Riverton, Cody, Powell, Dubois, Gillette, Sheridan, Newcastle, and Torrington, plus numerous communities in between.

WDEQ/WQD received comments from many different entities during the comment periods, including regional and local offices of the United States Forest Service. The USFS manages some of the most publicly accessible and heavily recreated lands in Wyoming. Comments received from the USFS (Black Hills National Forest; Medicine Bow-Routt National Forests and Thunder Basin National Grasslands; and Intermountain Region) during the August 6, 2013 to September 30, 2013 first comment period indicated that the UAA was designating too many streams for primary contact recreation and comments received during the January 28, 2014 to March 14, 2014 comment period were supportive of the UAA.

WDEQ/WQD has not received any data, photos, or information suggesting that streams being proposed for secondary contact recreation through the *Categorical UAA for Recreation* are currently being used for primary contact recreation. If data and information is presented to WDEQ/WQD that indicates streams that are designated for secondary contact recreation are being used for primary contact recreation, WDEQ/WQD will use this information to verify and potentially modify the recreational use of those streams.

### 3.4 Validation Photos

**Entity:** Wyoming Association of Conservation Districts

**Comment:** "WACD appreciates the addition of the Conservation Districts photographs and site information as the districts conducted 720 field surveys throughout Wyoming. This additional information along with WDEQ's photographs and site information gives a more accurate, well rounded depiction of the variation of stream types and drainages through the State of Wyoming."

**Response:** WDEQ appreciates WACD's support of this change to the UAA and appreciates the considerable effort of WACD and the Conservation Districts that conducted surveys for the UAA.

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<sup>1</sup> Wyoming Public Media: <http://wyomingpublicmedia.org/about-us>



### 3.5 Data Layers and Buffers

**Entity:** Wyoming Association of Conservation Districts

**Comment:** *'Datasets and 1.0 mile and 0.5 mile buffers were used to identify 24k primary areas and 100k NHD streams for primary contact recreation based on the likelihood that streams will be used for primary contact recreation (Table 1).'*

*Trailheads and dispersed campsites located on public land and in close proximity to roads were identified as other recreation areas where nearby streams may be used for primary contact recreation. Streams within 0.5 miles of a dispersed campsite or trailhead that were within 0.25 miles of a road and located on public land were designated for primary contact recreation (Table 1).'*

*"WACD commends WDEQ for modifying the access criteria to 0.5 miles and 1.0 mile buffers for established recreation areas and other recreation areas, and appreciates the improvements made to Table 1. Datasets and buffer distances used to identify low flow streams that may be used for primary contact recreation in the Categorical UAA for Recreation, which now depicts a more accurate set of criteria."*

**Response:** WDEQ appreciates WACD's support of these changes to the UAA.

**Entity:** Wyoming Association of Conservation Districts

**Comment:** *'The 24k primary areas and 100k streams identified for primary contact recreation by were those: within or one mile from census blocks with population densities of 55 persons per square mile or greater; within one mile of a school; within 0.5 miles of established campgrounds, United States Forest Service (USFS) recreation sites, Natural Areas, and Wyoming Department of Transportation (WYDOT) Rest Areas; within National Parks and Recreation Areas, State Parks and Historic Sites.'*

*"WACD agrees with WDEQ's decision to remove Wildlife Habitat Management areas as a designated Recreation area."*

**Response:** WDEQ appreciates WACD's support of this change to the UAA.

**Entity:** Wyoming Association of Conservation Districts

**Comment:** *"WACD commends WDEQ on Figure 26. Areas of Wyoming where 24k streams are designated for primary contact recreation. The map is more defined and easier to understand."*

**Response:** WDEQ appreciates WACD's support of the changes DEQ made to this figure. WDEQ has also modified the "24k primary areas" description to "primary areas" to specify that any waterbody in those area, regardless of whether they are present in the 24k NHD, are designated for primary contact recreation.

**Entity:** Niobrara Conservation District

**Comment:** “The Categorical UAA for Recreation, 4.2.2 Established Recreation Areas, page 34 states: *Established recreation areas were identified as campgrounds, USFS and BLM recreation sites, natural areas, WYDOT Rest Areas, National Parks and Recreation Areas, and State Parks and Historic Sites. Streams within the boundaries of parks, monuments, or historic sites, or within 0.5 miles of other types of established recreation areas were designated for primary contact recreation, as streams located within these areas may be used for primary contact recreation because they are easily accessible to children and/or members of the public.*

The NCD understands the need for protection of waters within the .5 mile buffer of established recreation areas, including WYDOT rest areas, when those waters are flowing streams, visible to the public, accessible from public land and thereby providing opportunities for recreation in those waterbodies. However, many streams within a .5 mile buffer of a WYDOT Rest Area are not visible or accessible from public lands and do not provide opportunities for recreational activity.

The Mule Creek Junction Rest Area, in Niobrara County, was added to the second DRAFT as a recreation area. This resulted in 3 stream segments classified as ‘primary recreation due to access’ (object ID #'s 11833, 11838, 11839). The rest area itself is located on public land with the rest area boundary delineated by a 4 strand, barbwire fence with rangeland to the north and east, and HWY 85 and 18 to the west and south. The rest areas has composting toilets and plastic grass due to the limited water availability in the area. The rest area does have a small playground and some picnic benches next to the building. There is no advertising of recreational opportunities beyond the boundaries of the rest area.

Of the three segments listed, two (Object ID 11833 and 11838) are ephemeral draws that only run water in response to a storm event. Neither of these draws is visible from the rest area and both are located on private land, through a 4 strand, barbwire fence. Object ID 11833 is a draw that lays to the northeast of the rest area and is not visible due to topography. Object ID 11838 is a draw across HWY 18, to the south, through the right-of-way fence and again not visible due to topography. Object ID 11839 is an old irrigation ditch no longer in use. This segment lays on private land across HWY 85, to the west and accessed only by a private road or through a 4 strand, barbwire, right-of-way fence. Again this segment is not visible from the rest area to invite opportunity. We would conclude that none of these segments could or would be used for recreation activities that would have the risk of ingesting water. We have included photos of the rest area and each segment in relation to the rest area. (Appendix A).

**Response:** The Mule Creek Junction Rest Area was mistakenly omitted from the August 2013 draft of the *Categorical UAA for Recreation*; WDEQ/WQD apologizes for this error. WDEQ/WQD appreciates the analysis and information submitted by the Niobrara Conservation District regarding the three stream segments near the Mule Creek Junction Rest Area. Since *the Categorical UAA for Recreation* has already been through



two comment periods, WDEQ/WQD will process the information submitted by Niobrara Conservation District as site-specific UAAs for these streams/ditches. The information submitted by the Niobrara Conservation District should be a sufficient demonstration that the two ephemeral draws and one abandoned irrigation ditch are not accessible to the public from the rest area and therefore have no potential to be used for primary contact recreation. WDEQ/WQD will compile the information and conduct a separate comment period on these segments.

**Entity:** **Niobrara Conservation District**

**Comment:** “The Categorical UAA for Recreation, 2.3 EPA Guidance on Recreation Use Attainability Analyses, on page 5 states: *The 1992 guidance outlines that “in the case of potential uses, the decision must be based on consideration of a variety of factors affecting potential (e.g., access, flow, depth)” (EPA 1992). The 2004 guidance states that “less than ‘swimmable’ standards may be considered, for example, where flowing or pooled water is not present within a waterbody during the months when primary contact recreation would otherwise take place and the waterbody is not in close proximity to residential areas, thereby indicating that primary contact uses are not likely to occur. Also, if a state or authorized tribe can demonstrate that natural, ephemeral, intermittent, or low flow condition or water levels prevent attainment of the primary contact recreation use, a secondary contact recreation use may be appropriate” (EPA 2004).*

3.3.2 Mean Annual Flows of Streams Not Supporting Primary Contact Recreation, pg 15, states: *It is important to note, however, that while using EROM mean annual flows is appropriate for identifying streams that do not have sufficient flow to support primary contact recreation at a statewide scale, there are likely streams with mean annual flows of 6 cfs or greater that also do not have sufficient flow to support primary contact recreation. For these streams, site-specific information should be collected to demonstrate that there is not sufficient flow and/or depth to support primary contact recreation, even though the EROM mean annual flow is 6 cfs or greater. In addition to demonstrating that there is not sufficient flow and/or depth to support primary contact recreation, a site-specific UAA would also need to show that the stream is not used for or likely to be used for primary contact recreation.*

The Categorical UAA shows Snyder Creek, in northern Niobrara County, with a 3.09 mile segment that is listed as primary recreation due to flow. Based on the EROM the flow in this segment ranges from 6.357 cfs at the Cheyenne River to 6.044 at the most upstream point of the segment.

This stream is located on private rangeland approximately 26 miles from the closest recreation area, Mule Creek Junction Rest Area. The closest population centers are: Edgemont SD, 48 miles away, Newcastle WY, 60 miles away and Lusk WY, 70 miles away. This area is sparsely populated with individual ranches. Access to the stream segment is on approximately 20 miles of gravel county road and over 2 miles of dirt

county road. The last segment of county road has a stream crossing of the Cheyenne River which is impassable at high flows. (Appendix B)

Snyder Creek is an ephemeral stream that flows only in response to significant storm events in the immediate area. The resulting flows are very flashy and short lived. The soil types in the area show runoff as medium to very rapid supporting this type of flow regime. (Appendix C)

The Niobrara Conservation District has attempted to collect water samples in conjunction with our Baseline Water Sampling Project since 2001. In that time frame we have collected 2 water samples from Snyder Creek when it was flowing and accessible (able to cross the Cheyenne River). Those samples were collected in 2002 with recorded flows of 2.64 cfs on 8/6 and 10.38 cfs on 8/26. The creek was dry until the Aug 6<sup>th</sup> flow and was standing water by Sept 4<sup>th</sup>. All other observations have been of a dry streambed or isolated pools. These observations would indicate a lack of flow for much of the season and that when Snyder Creek does flow, the flows are very flashy and of a short duration. (Appendix D)

In September 2001 the Niobrara Conservation District photographed segments of Snyder Creek from the Cheyenne River confluence upstream for approximately 3.5 miles. The resulting photographs show a densely, well vegetated streambed. The streambed itself supports a vigorous sedge community; the photos show areas of sagebrush encroachment along the stream banks, indicating drier vegetative community along the banks. Although EROM may show a mean annual flow of greater than 6 cfs there obviously is not a base flow to maintain any kind of substrate free of vegetation. More recent photos taken near the Cheyenne River confluence show the maintenance of these communities. (Appendix E)

So it would seem apparent that although Snyder Creek may show a mean annual flow of greater than 6 cfs the flows come in such a manner as to not support recreational activities. The limited access to Snyder Creek also does not support recreational use. Snyder Creek is on private land, miles from any recreation area or population center and is cut off from access during high flows when the stream is the most likely to flow. These factors make the probability of Snyder Creek being used for recreational purposes nonexistent. Due to all of these factors we would suggest that Snyder Creek does not support a primary recreation designation and should be changed to a secondary recreation classification.”

**Response:** Based on the information submitted by Niobrara Conservation District, WDEQ/WQD agrees that Snyder Creek should be designated for secondary contact recreation. Snyder Creek does not have sufficient flow to support primary contact recreation and there is little to no likelihood of ingestion of the water by children and/or members of the public. To eliminate the need for another public comment period for the *Categorical UAA for Recreation*, WDEQ will process Snyder Creek as a site-specific UAA with a separate comment period.

### 3.6 Extensions

**Entity:** Wyoming Association of Conservation Districts

**Comment:** *'To help eliminate primary streams, two primary segments separated by an isolated secondary segment were extended to include the isolated secondary segment. Side channels of braided primary streams were also designated as primary.'*

"WACD agrees with this criterion for the extension process and appreciates the modification of designating extensions upstream and downstream to the nearest 100k NHD confluence or lake, or upstream to the terminus of the stream."

**Response:** WDEQ appreciates WACD's support of this change to the extension process.

### 3.7 Results

**Entity:** Wyoming Association of Conservation Districts

**Comment:** 6.0 Results, Page 36

*'Of these 92,712 stream miles, approximately 5,750 stream miles occur in areas frequented by the public and/or children due to their proximity to schools, towns, and recreation areas.'*

*'An additional 1,235 stream miles were designated as primary through the extension process to eliminate isolated primary or secondary stream segments.'*

"These numbers seem to reflect a more accurate representation of stream miles with access to the public and/or children and stream miles associated with the extension process compared to the first calculations of 7,298 miles and 6,261 stream miles respectively."

**Response:** WDEQ appreciates WACD's support of changes made to the UAA.

**Entity:** Western Watersheds Project

**Comment:** "WDEQ is proposing to change the designated recreation use from primary to secondary contact recreation for 88% of the total stream miles and 9% of total lake acres, resulting in the application of less-stringent criteria for E. coli bacteria."

**Response:** Per the January 2014 draft of the *Categorical UAA for Recreation*, as well as the most recent draft of the UAA, WDEQ/WQD is proposing to change the designated recreation use of approximately 76% of the streams depicted in the 100,000 (100k) National Hydrography Dataset and none of the lakes, ponds reservoirs in the state to secondary contact recreation.

**Entity:** **Western Watersheds Project**

**Comment:** “Section 101(a)(2) of the CWA states the national goal of achieving ‘water quality standards which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water’ wherever attainable. CWA section 303(c)(2)(A) requires water quality standards to ‘protect the public health and welfare, enhance the quality of water, and serve the purposes’ of the CWA. The EPA’s regulation at 40 CFR Part 131 interprets and implements these provisions through a requirement that water quality standards protect the uses specified in section 101(a)(2) (i.e., aquatic life and recreation) unless those uses have been shown to be unattainable. EPA’s longstanding interpretation is that the water quality standards regulation establishes a rebuttable presumption that the uses specified in section 101(a)(2) are attainable unless demonstrated otherwise. The mechanism for making such a determination is a UAA, defined at 40 CFR § 131.3(g) as a ‘structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g).’

The EPA’s water quality standards regulation states in 40 CFR § 131.10(g) that ‘States may remove a designated use that is not an existing use, as defined in section 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible’ based on one of the six factors in 40 § CFR 131.10(g), which are included in Wyoming’s Section 33(b).

These rules embody a ‘rebuttable presumption’ that certain uses cannot be removed except under narrowly circumscribed conditions. *63 Fed. Reg. 36,742, 36,749* (July 7, 1998) Fishable and swimmable uses are considered attainable and should apply to a water body unless it is affirmatively demonstrated that such uses are not attainable.

Usually, UAA’s are completed on a site-specific basis. However, Section 2.9 of the EPA’s Water Quality Standards Handbook 5 discusses the ability of states to conduct UAAs for groups of waters, sometimes called a categorical UAA. Specifically, the Handbook says ‘States may also conduct generic use attainability analyses for groups of water body segments provided that the circumstances relating to the segments in question are sufficiently similar to make the results of the generic analyses reasonably applicable to each segment.’

Unfortunately, the GIS process utilized by the DEQ does not affirmatively demonstrate that primary contact recreation is not attainable nor does the DEQ affirmatively demonstrate that primary contact is not an existing use.

As the EPA commented previously: ‘For example, a stream may have low flow (§ 131.10(g)(2)) that may prevent swimming by adults, but if it is located in an urban area where children could play, ingest, or immerse themselves in the water, that is an indication that low flow may not prevent attainment of the use.’

In addition to the 'low flow' issue, the DEQ misconstrues the rebuttable presumption in relation to 'access.'

In its Categorical UAA document, the DEQ states 'Wyoming has thousands of miles of streams that do not support primary contact recreation because there is not enough water to support immersion (full body contact) activities and there is little potential for children or other members of the public to ingest small quantities of water because the stream is not located near recreation sites or areas frequented by children or the public.'

Assuming these 'thousands of miles of streams' mean those being categorically downgraded, the DEQ has provided no evidence whatsoever that primary contact recreation is not an existing use. I have engaged in primary contact recreation on hundreds of streams over the last nearly 40 years across Wyoming that are being categorically downgraded based on the assumption that it is not an existing use. A few examples would be:

1)	Sawmill Creek	42.236	110.851
2)	Dutch George Creek	42.174	110.463
3)	Rock Creek	42.327	110.424
4)	Trail Ridge Creek	42.481	110.376
5)	Spring Creek	42.491	110.62
6)	Apperson Creek	42.704	110.531
7)	Nylader Creek	42.833	110.523
8)	Slide Creek	43.261	109.736
9)	Alpine Creek	43.073	109.537
10)	Coon Creek	42.669	109.114
11)	Tayo Creek	42.681	109.113
12)	Little Sandy	42.196	109.153
13)	Sulphur Bar Creek	42.324	108.336
14)	Deep Creek	42.45	108.519
15)	Black Joe Creek	42.729	109.156
16)	Gold Creek	42.446	108.952
17)	Mill Creek	42.543	109.047
18)	Mill Creek	42.462	108.96
19)	Donald Creek	42.758	109.265
20)	Hooker Creek	42.86	109.297
21)	Rapid Creek	42.716	109.181
22)	Clear Creek	42.737	109.191

Next, the DEQ uses the logic that 'because the stream is not located near recreation sites or areas frequented by children or the public.' that primary contact recreation is not an existing use and therefore the 'swimmable' use can be removed. The DEQ categorizes primary as 'children and/or the public have easy access to the stream.' But nowhere in the CWA and its implementing regulations is 'easy access' a requirement

for protection. While there are issues of fenced private with no access, the DEQ does not utilize that, but merely is they are not near a city or developed campground. This is the same myopia that looks at primary/secondary from the perspective of a city dwelling adult not a child. Wyoming has world class recreation opportunities that attract people from all over and only a small fraction of the recreation that occurs does so adjacent to cities and developed campgrounds.”

**Comment:** “The DEQ continues ‘For streams where the UAA indicates that there is not sufficient water availability (low flow conditions) to support primary contact recreation, not sufficient access or recreational opportunity to support primary contact recreation, and public feedback has not indicated that the streams is used for primary contact recreation, primary contact recreation is presumed not to be an existing or attainable use and can be removed.’

As stated above, I, just as one example, have had primary contact recreation in many streams the DEQ has arbitrarily determined ‘that there is not sufficient water availability (low flow conditions) to support primary contact recreation.’ These locations also have sufficient ‘access’ or ‘recreational opportunity’ that has supported primary contact recreation. None of the sites I listed above or the others I have had primary contact in have had restricted access, unless the DEQ’s definition of ‘access’ is beyond the water cooler.”

**Comment:** “DEQ’s approach is insufficient to comply with the letter or intent of the CWA and as such should be rejected.”

**Response:** As outlined in the *Categorical Use Attainability Analysis for Recreation*, the UAA was developed in a manner consistent with the Department of Environmental Quality’s Water Quality Rules and Regulations, Chapter 1, *Wyoming’s Use Attainability Analysis Implementation Policy*, the federal Clean Water Act, Federal Regulations Part 131, EPA guidance on water quality standards and UAAs, EPA and other state’s guidance on conducting recreation use attainability analyses, EPA Region 8 feedback, stakeholder input, public and stakeholder comments, etc. The resulting UAA successfully identifies streams in the state where primary contact recreation is not an existing or attainable use because there is insufficient water to support immersion (full body contact) activities and there is little potential for children or other members of the public to ingest small quantities of water from the stream because the stream is not located near recreation sites or areas frequented by the children or the public. In addition, WDEQ/WQD used over 850 field verification sites to validate the results of the UAA and solicited public feedback specifically asking for any locations not captured in the UAA where primary contact recreation is an existing use.

As outlined in Section 3.1 of the *Categorical UAA for Recreation*, states in EPA’s Regions 6 and 7 have successfully demonstrated that primary contact recreation is not an attainable use based on factor 2, the low flow factor, found at 40 CFR 131.10(g)(2) and Section 33(b)(ii) of Chapter 1 of Wyoming’s Water Quality Rules and Regulations.

States in Regions 6 and 7 used mean depth measurements of 18 inches and 0.5 meters (19.7 inches) to demonstrate that a stream does not provide sufficient flow and/or depth for total body immersion in a prone position. In lieu of depth information, WDEQ/WQD selected a modeled mean annual flow threshold to identify ephemeral, small intermittent and very small perennial streams. These streams do not have sufficient flow and/or depth to support full body immersion in a prone position.

The state then used additional datasets to identify streams that should be protected for primary contact recreation due to their proximity to towns, schools, recreation sites, etc., despite the fact that they may not have enough flow to support full body immersion. Although neither federal nor state regulations articulate access as one of the factors affecting the attainment of the primary contact recreation use, WDEQ/WQD believes access is a critical factor in identifying streams that should be protected for primary contact recreation despite the fact that they may not have sufficient depth and/or flow to support immersion (full body contact). Easily accessible streams need to be protected for primary contact recreation, regardless of the amount of water in the stream, because water from these streams may be ingested by children or other members of the public.

EPA's 1992 and 2004 guidance documents on UAAs both identified access as a critical component of recreation UAAs. EPA Region 8's 1992 guidance on recreation UAAs outlines that "In the case of potential uses, the decision must be based on a consideration of a variety of factors affecting potential (e.g., access, flow, depth). Although physical factors such as flow and depth may be considered in conducting such assessments, physical factors should not be the sole measure of attainability."

EPA's 2004 guidance on recreation UAAs states that "less than 'swimmable' standards may be considered, for example, where flowing or pooled water is not present within a waterbody during the months when primary contact recreation would otherwise take place and the waterbody is not in close proximity to residential areas, thereby indicating that primary contact uses are not likely to occur." WDEQ/WQD followed the approach articulated in EPA guidance on recreation UAAs in the *Categorical UAA for Recreation* by including access as a component of the UAA.

The stream locations identified by Western Watersheds Project as being used for primary contact recreation (with longitude modified with a negative) range in modeled mean annual flow from 0.6 cfs to 5.3 cfs and range from 0.25 miles to 11.9 miles from the nearest road (Table 1).



Table 1. NHDPlus Version 2 Mean Annual Flow and Distance from a Roads Used in the UAA for Western Watersheds Project Site Locations

No.	Letter Stream	NHD Mean Annual Flow (cfs)	Distance from Road (miles)	Notes
1	Sawmill Creek	4.9	1.0	
2	Dutch George Creek	2.7	3.7	
3	Rock Creek	4.4	2.7	
4	Trail Ridge Creek	5.3	3.7	
5	Spring Creek	4.6	0.7	
6	Apperson Creek	4.9	0.3	
7	Nylander Creek	4.9	0.3	
8	Slide Creek	2.4	7.0	
9	Alpine Creek	1.4	11.9	
10	Coon Creek	5.3	5.7	
11	Tayo Creek	4.9	6.5	
12	Little Sandy	0.9	0.7	Coordinates fall on Pacific Creek.
13	Sulphur Bar Creek	0.6	6.8	
14	Deep Creek	0.9	1.8	
15	Black Joe Creek	4.2	6.5	
16	Gold Creek	4.2	2.9	
17	Mill Creek	2.5	5.5	
18	Mill Creek	4.0	3.6	
19	Donald Creek	3.8	4.8	
20	Hooker Creek	3.2	11.9	
21	Rapid Creek	2.4	5.0	
22	Clear Creek	3.9	5.3	

As outlined in Wyoming's Water Quality Rules and Regulations, Chapter 1, primary contact recreation "means any recreational or other surface water use that could be expected to result in ingestion of the water or immersion (full body contact)." Western Watersheds Project does not include any information indicating that immersion (full body contact) is possible on these streams. Furthermore, Western Watersheds Project does not include any information indicating that children or other members of the public are routinely visiting and ingesting water from these remote streams during recreational activities.

Since no information is presented on how primary contact recreation is attainable in these low flow streams, no information is presented to suggest that immersion (full body contact) is possible in these low flow waters, and no information is presented to indicate that children or other members of the public are routinely ingesting water from these streams during recreational activities, WDEQ/WQD does not have sufficient evidence at this time to retain the primary contact recreational use of these streams.

Additional information that speaks to the recreational use of these streams can be submitted to WDEQ/WQD at any time to be considered toward revising the recreational use.



**Entity:** Western Watersheds Project

**Comment:** “Disturbingly, the DEQ reverses the principle of rebuttable presumption when it its request for comments states ‘Comments containing specific feedback regarding the recreational use of a stream should be accompanied by detailed information such as photos, landowner testimony, mean annual flow, user surveys and also include information to identify the location of the stream (i.e., stream name, latitude, longitude, stream ID number, etc.).’ Yet it does not hold itself to this same level when it proposes downgrading most of Wyoming’s streams. DEQ reverses the primary until proven secondary by shifting the burden to the public to rebut DEQ’s presumption of secondary. This does not comply with the CWA.

WWP does not oppose categorical downgrades on principle. For instance, ephemeral streams could easily be designated through a similar process.

EPA’s UAA Guide states ‘Existing uses, by definition, are attainable and must be designated in water quality standards if they have not already been so designated [40 CFR 131.10(i) and 131.12(a)(1)].’ The proposal violates these regulations.

It also states ‘A UAA is inappropriate whenever: (c) designated uses are existing uses.’

Regarding data requirements, the Guide states ‘A UAA need not, necessarily, require collection of new data. Appropriate existing data can form the basis for a UAA; however, any data used as the basis for attainability arguments must be scientifically defensible, i.e., collected using approved methods including appropriate QA/QC procedures. In addition, the data on which a proposed standards change will be based must appropriately reflect current conditions in the waterbody. It is the Region’s position that, in most cases, UAA decisions should be based on a biological, chemical and physical survey that has been conducted on the waterbody in question within the last five years. This, of course, does not rule out reference to older data, but emphasizes that any contemplated standards revision must be based on current information about existing and potential uses for the waterbody.

This was not followed.”

**Response:** As mentioned previously, the UAA was developed in a manner consistent with the Department of Environmental Quality’s Water Quality Rules and Regulations, Chapter 1, *Wyoming’s Use Attainability Analysis Implementation Policy*, the federal Clean Water Act, Federal Regulations Part 131, EPA guidance on water quality standards and UAAs, EPA and other state’s guidance on conducting recreation use attainability analyses, EPA Region 8 feedback, stakeholder input, public and stakeholder comments, etc.

WDEQ/WQD used the data and information most relevant to identifying streams in the state that do not support primary contact recreation and where primary contact recreation is not an existing use.

It is unclear from Western Watersheds Project's comments which EPA UAA guide is being referenced and whether this UAA guide is specific to recreation UAAs. WDEQ/WQD has not been made aware any instances in which primary contact recreation is an existing use on waters that are proposed for secondary contact recreation in the *Categorical UAA for Recreation*. Furthermore, WDEQ/WQD has not been made aware of any public health concerns or other data regarding any waters being proposed for secondary contact recreation in the *Categorical UAA for Recreation*.

**Entity:** Western Watersheds Project

**Comment:** "Looking at EPA's UAA Worksheet, it is clear a far more detailed level of site-specific information is needed.

Region 8's policy on this matter is:

With regard to the swimmable component of this national goal, EPA recognizes that the physical characteristics (e.g., depth, flow) of some western waterbodies do not lend themselves to swimming and other forms of primary contact recreation. However, the general Agency policy on this issue is to place emphasis on the potential uses of a waterbody and to do as much as possible to protect the health of the public (see 48 FR 51401 and the Water Quality Standards Handbook at p. 1-6). In certain instances, the public will use whatever waterbodies are available for recreation, regardless of the flow or other physical conditions. Accordingly, EPA encourages States to designate primary contact recreation uses, or at least to require a level of water quality necessary to support primary contact recreation, for all waterbodies with the potential to support primary contact recreation.

The present process does not comply with any of the 4 options laid out in EPA's guidance document.

This Region 8 document also states 'For example, in situations where an evaluation of relevant factors indicates that existing and potential primary contact recreation uses cannot reasonably be presumed to exist, it may not be necessary or appropriate to set standards in support of the swimmable goal.' The DEQ's process in no way determines that 'existing and potential primary contact recreation uses cannot reasonably be presumed to exist'."

**Response:** The *Categorical UAA for Recreation* is consistent with option 4 of the 1992 Region 8 guidance. Option 4 of the EPA Region 8 1992 guidance on *Recreation Standards and the CWA Section 101(a)(2) "Swimmable" Goal* shown on page 2 describes that states can "Conduct and submit to EPA for review use attainability analyses (UAAs) for all waters where recreation standards are not consistent with the CWA Section 101(a)(2)

goal. Such UAAs are required by Section 131.10(j)(1) of the water quality standards regulation.”

WDEQ/WQD is familiar with EPA’s guidance documents on water quality standards, use attainability analyses, and recreation UAAs. Furthermore, WDEQ/WQD has worked closely with EPA on development of the *Categorical Use Attainability Analysis for Recreation*. To this end, EPA Region 8 has responded that they “appreciate the efforts of WDEQ to address our comments throughout this project.” Region 8 also stated that the “UAA incorporates an appropriate level of conservatism for a state-wide approach.”

WDEQ/WQD is unaware of any instances in which the Categorical UAA for Recreation is inconsistent with any state or federal regulations or guidance.

**Entity:** **Western Watersheds Project**

**Comment:** “Interestingly, the examples provided at the end of this document likewise do not support the DEQ’s decision. The example most closely fitting the current categorical downgraded states:

Example 1: A small headwater mountain stream segment unaffected by human sources of fecal contamination has no known exiting recreational uses. Animal sources result in occasional exceedances of the primary contact bacterial criteria, but data are limited. Access to the segment is extremely limited. There would be no treatment costs associated with swimmable goal standards because there are no point sources on the segment. Physical conditions (temperature, flow, depth) are not conducive to swimming (and swimming may be dangerous), but occasional pools of sufficient depth for total body immersion exist.

DECISION: Apply a secondary contact recreation use and a criterion sufficient to support primary contact recreation, with a rebuttable presumption that the indicator shows contamination of human origin.

So even in this case the criterion would still be to protect primary contact. Please review EPA’s entire document.”

**Response:** The example cited by Western Watersheds Project from the 1992 Region 8 guidance is not similar to the streams in the *Categorical UAA for Recreation* in that WDEQ/WQD is not aware of any “pools of sufficient depth for total body immersion.” During the August 6 to September 30, 2013 public comment period, WDEQ/WQD specifically asked members of the public to identify any pools or deep water areas not identified as primary in the draft UAA.

### 3.8 Credible Data

**Entity:** Western Watersheds Project

**Comment:** “Section 35 (c) states ‘All changes to use designations after the effective date of this rule shall include the consideration of credible data relevant to the decision. Changes which involve the removal of a use designation or the replacement of a designation shall be supported by a use attainability analysis (UAA).’

The DEQ did not consider Section 35 ‘Credible Data’ in making the decision to downgrade waters statewide from primary to secondary contact recreation. There is no ‘credible data’ supporting the downgrading of the majority of waters.”

**Response:** WDEQ/WQD considered all readily available data relevant to determining the recreational use of streams during development and revision of the *Categorical UAA for Recreation*. Data presented during the public comment periods was also considered and incorporated into the UAA where appropriate. WDEQ/WQD is unaware of any “credible data relevant to the decision” that was not considered during the development of the UAA. As such, the *Categorical UAA for Recreation* is consistent with Chapter 1, Section 35.

LP/rm/14-0741

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Figure A-1. Wyoming Association of Conservation Districts (3 pages).



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Wyoming Association of Conservation Districts  
517 E. 19th Street - Cheyenne, WY 82001 - Phone: 307-632-5716 - Fax: 307-638-4099  
[www.conservewy.com](http://www.conservewy.com)

March 14, 2014

*Hand Delivery*

Lindsay Patterson  
Wyoming Department of Environmental Quality  
Herschler Building, 4-W  
122 West 25<sup>th</sup> Street  
Cheyenne, WY 82002

**RE:    *Categorical Use Attainability Analysis for Recreation***

Dear Ms. Patterson,

The Wyoming Association of Conservation Districts appreciates the opportunity to provide comment and input on the above referenced Categorical Use Attainability Analysis for Recreation. WACD supports and encourages the approval of this model in a timely fashion. Based on feedback from local districts and review by the Watershed Coordinators, this categorical UAA will result in a much higher accuracy for recreational designated uses. WACD believes there will be isolated incidents where a more thorough site specific UAA may be necessary however this will be limited.

**1.0 Summary, Page 1 & 6.1 Surveys, Page 39**

*“There was 93.4% agreement between the primary surveys before extensions and 94.9% agreement after extensions; there was 80.5% agreement between all the surveys and the UAA before extensions and 79.9% agreement after extensions. Of Wyoming’s 112,890 stream miles depicted in the 1:100,000 National Hydrologic Dataset (NHD), 85,727 miles or 75.9%, do not support primary contact recreation.”*

**COMMENT:** WACD commends WDEQ for verifying all available data and double checking the accuracy to reach the best agreement percentage possible and stands behind the overall agreement before extensions of 80.5% and after extensions of 79.0% between the two sets of surveys.

**2.4 Wyoming’s Categorical Use Attainability Analysis for Recreation, Page 6**

*“Public feedback focused on whether primary contact recreation is an existing use in areas other than those identified in steps one and two. These areas included any pools, deep water areas, or other sites located on “low flow” streams not identified in one of the GIS datasets. Based on the feedback received during the August 6 to September 30, 2013 public comment period, there are not any pools or deep waters areas located on “low flow” streams that are used for primary contact recreation that are not designated for primary contact recreation in the UAA.”*

**COMMENT:** WACD appreciates the opportunity DEQ afforded to provided additional information pertaining to pools, deep water areas or other areas. WACD would concur that the lack of submittal of



these type of identified areas on low flow systems is consistent with the hydrology of these type of intermittent and ephemeral drainages and draws.

### **3.3.4 Validation: WDEQ Field Survey Photos, Pages 21-31**

**COMMENT:** WACD appreciates the addition of the Conservation Districts photographs and site information as the districts conducted 720 field surveys throughout Wyoming. This additional information along with WDEQ's photographs and site information gives a more accurate, well rounded depiction of the variation of stream types and drainages throughout the State of Wyoming.

### **4.2 Data Layers and Buffers, Pages 33-35**

*"Datasets and 1.0 mile and 0.5 mile buffers were used to identify 24k primary areas and 100k NHD streams for primary contact recreation based on the likelihood that streams will be used for primary contact recreation (Table 1)."*

*"Trailheads and dispersed campsites located on public land and in close proximity to roads were identified as other recreation areas where nearby streams may be used for primary contact recreation. Streams within 0.5 miles of a dispersed campsite or trailhead that were within 0.25 miles of a road and located on public land were designated for primary contact recreation (Table 1)."*

**COMMENT:** WACD commends WDEQ for modifying the access criteria to 0.5 and 1.0 mile buffers for established recreation areas and other recreation areas, and appreciates the improvements made to Table 1. *Datasets and buffer distances used to identify low flow streams that may be used for primary contact recreation in the Categorical UAA for Recreation*, which now depicts a more accurate set of criteria.

### **4.2.2 Established Recreation Areas, Page 35**

*"The 24k areas and 100k streams identified for primary contact recreation by were those: within or one mile from census blocks with population densities of 55 persons per square mile or greater; within one mile of a school; within 0.5 miles of established campgrounds, United States Forest Service (USFS) recreation sites, Natural Areas, and Wyoming Department of Transportation (WYDOT) Rest Areas; within National Parks and Recreation Areas, State Parks and Historic Sites."*

**COMMENT:** WACD agrees with WDEQ's decision to remove Wildlife Habitat Management areas as a designated Recreation area.

### **4.3 Recreation Use Designations, Page 36**

**COMMENT:** WACD commends WDEQ on Figure 36. *Areas of Wyoming where 24k streams are designated for primary contact recreation.* The map is more defined and easier to understand.

### **5.0 Extensions, Page 36**

*"To help eliminate isolated primary streams, two primary segments separated by an isolated secondary segment were extended to include the isolated secondary segment. Side channels of braided primary streams were also designated as primary."*

**COMMENT:** WACD agrees with this criterion for the extension process and appreciates the modification of designating extensions upstream and downstream to the nearest 100k NHD confluence or lake, or upstream to the terminus of the stream.

### **6.0 Results, Page 36**

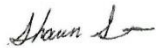
*"Of these 92,712 stream miles, approximately 5,750 stream miles occur in areas frequented by the public and/or children due to their proximity to schools, towns, and recreation areas."*

*"An additional 1,235 stream miles were designated as primary through the extension process to eliminate isolated primary or secondary stream segments."*

**COMMENT:** These numbers seem to reflect a more accurate representation of stream miles with access to the public and/or children and stream miles associated with the extension process compared to the first calculations of 7,298 miles and 6,261 stream miles respectfully.

Again, DEQ should be commended for this effort. We look forward to continue to work with DEQ on the mutual goal of maintaining and improving Wyoming's watershed health. This effort will ensure that the time, energy and resources are spent in an appropriate manner to protect the human health of Wyoming's citizens.

Sincerely,



Shaun Sims  
President

cc: Wyoming's Conservation Districts  
WACD Board of Directors  
Wyoming Department of Agriculture  
Governor's Office



Figure A-2. Environmental Protection Agency (2 pages).



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

March 14, 2014

Ref: 8EPR-EP

Lindsay Patterson  
Division of Water Quality  
Wyoming Department of Environmental Quality  
Herschler Building 4W  
122 W. 25<sup>th</sup> Street  
Cheyenne, WY 82002

Dear Ms. Patterson:

The U.S. Environmental Protection Agency (EPA) has reviewed the Wyoming Department of Environmental Quality's (WDEQ) January 28, 2014 public notice of the "Categorical Use Attainability Analysis for Recreation" and "Response to Comments for Comment Period Ending September 30, 2013." The UAA uses Geographic Information System (GIS) data to identify streams with insufficient flow to attain a primary contact recreation use.<sup>1</sup> In general, the EPA's preliminary thinking is that WDEQ's approach would be consistent with 40 CFR § 131.10(g)(2). We appreciate the efforts of WDEQ to address our comments throughout this project. We note that the EPA administers the Clean Water Act (CWA) in Indian country as defined at 18 U.S.C. 1151, which includes all lands, regardless of ownership, within the exterior boundaries of the Wind River Indian Reservation. Therefore, our comments below refer to waters located outside of the Wind River Indian Reservation.

The EPA regulations at 40 CFR part 131 interpret and implements CWA section 101(a)(2) and 303(c)(2)(A) to require that the uses specified in section 101(a)(2) of the CWA, which includes "recreation in and on the water," are presumed attainable unless a state or tribe affirmatively demonstrates through a UAA that the use is not attainable as provided by one of the six factors at 40 CFR § 131.10(g).<sup>2</sup> To support an attainability decision under 131.10(g), the EPA's suggested approach is for states to also consider a suite of factors, such as actual use, existing water quality, water quality potential, access, recreational facilities, location, safety considerations, and physical conditions.<sup>3</sup>

Consistent with 40 CFR § 131.10(g)(2), the scope of the UAA is limited to low flow streams (mean annual flow < 6 cubic feet/second). The UAA concludes that of Wyoming's 112,890 stream miles,

<sup>1</sup> Protects humans from gastrointestinal illness where there is the potential for ingestion or immersion. See *Wyoming Water Quality Rules and Regulations*, Chapter 1, Section 2.

<sup>2</sup> See 63 Fed. Reg. 36742, 36749 (July 7, 1998) and 78 Fed. Reg. 54518, 54522 (September 4, 2013).

<sup>3</sup> See 63 Fed. Reg. 36742, 36756 (July 7, 1998).

92,712 stream miles (82%) do not have sufficient flow to support primary contact recreation. This is not surprising, considering Wyoming is the third driest state in the nation. However, consistent with the EPA's "suite of factors" guidance, Wyoming also developed an innovative approach using GIS data layers representing populated places, schools, and recreation areas to determine if there were streams that should be protected for primary contact recreation despite low flow, in order to protect Wyoming's residents, and in particular, its children, from gastrointestinal illness. Although Wyoming is the least populous state in the United States, almost 7,000 miles of low flow streams are proposed for primary contact recreation based on this analysis.

The UAA incorporates an appropriate level of conservatism for a state-wide approach. In addition, the site-specific UAA process will remain a tool for the state to refine recreational uses over time. This refinement of designated uses is an integral part of any state water quality program. However, the EPA recognizes that Wyoming's UAA approach may not be appropriate in all parts of the United States considering our hydrologic diversity.

In summary, the EPA's preliminary thinking is that WDEQ's draft approach for identifying streams with insufficient flow to support a primary contact recreation use would be consistent with 40 CFR § 131.10(g)(2). The EPA will consider the public comments and the final submission of the state prior to making a final decision under CWA § 303(c). If you have any questions, please call Tonya Fish on my staff at (303) 312-6832.

Sincerely,

A handwritten signature in black ink, appearing to read "Sandra Spence".

Sandra Spence, Chief  
Water Quality Unit

Figure A-3. USDA Forest Service, Rocky Mountain Region (1 page).



United States

Department of Agriculture

Forest Service  
Rocky Mountain  
Region

740 Simms Street  
Golden, CO 80401  
Voice: 303-275-5350  
TDD: 303-275-5367

File Code: 2530

Date: MAR 14 2014

Ms. Lindsay Patterson  
WDEQ/WQD  
Herschler Building 4W  
122 West 25th Street  
Cheyenne, WY 82002

RECEIVED  
MAR 17 2014  
WYOMING DIVISION

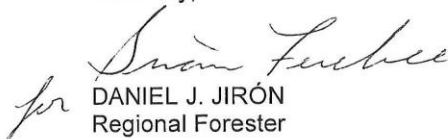
Dear Ms. Patterson

The U.S. Forest Service supports the effort of Wyoming Department of Environmental Quality (WDEQ) to appropriately classify waterbodies on National Forest System (NFS) lands in Wyoming for recreation uses. We recognize this task has taken many years to complete and are pleased to see it coming to fruition. WDEQ invited us to participate in the development of this Use Attainability Analysis from the beginning. We appreciate the cooperative spirit and your willingness to address our issues and concerns throughout the process.

Our policy is to protect all designated uses of water, including recreation uses, in waterbodies on NFS lands. However, the designated use should be consistent with the actual or potential use of the waterbody. We supported the shift from a single recreation use designation in the Wyoming Water Quality Rules and Regulations (Chapter 1) where all waters are managed for primary contact recreation to a system where certain waters are managed for primary contact recreation and the remaining waters are managed for secondary contact recreation. We felt this was important because it recognizes the different human health risks associated with the different types of waters and recreational uses in the State. The proposed changes in recreation use designation described in this "Categorical Use Attainability Analysis for Recreation" will help us to better manage water quality for protection of recreational use by focusing available resources to those locations where primary contact recreation use is actually occurring or can potentially occur.

Thank you for considering our comments.

Sincerely,

  
DANIEL J. JIRÓN  
Regional Forester

cc: Joan Y Carlson, Greg Bevenger, Cheryl Chatham



It's Cool to Be Safe

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Figure A-4. Peabody Energy (1 page).



**Peabody Powder River Operations, LLC**  
Caller Box 3034  
Gillette, Wyoming 82717-3034  
(307) 687-3900

March 11, 2014

Ms. Lindsay Patterson  
Wyoming Department of Environmental Quality  
Water Quality Division  
Herschler Building 4-W  
122 West 25<sup>th</sup> Street  
Cheyenne, WY 82002

**RE: Categorical Use Attainability Analysis for Recreation**

Dear Ms. Patterson:

Peabody Energy appreciates the chance to comment on the Categorical Use Attainability Analysis for Recreation. Peabody Energy operates four active coal mines in Campbell and Converse Counties and maintains a closed mine site near Hanna. Peabody Energy compliments the WDEQ/WQD for the improved document utilizing more discrete criteria for determining accessibility to streams and use of available flow data rather than National Hydrologic Dataset flow estimates. Peabody Energy considers the revised document much more representative of the streams in Wyoming where our mines are located than the draft document published in 2013.

Peabody Energy also encourages WDEQ/WQD to periodically review and update the web map as more information is gathered through the state and individual UAA's are developed.

Please call me at 307-687-3924 or e-mail me at [pmurphree@peabodyenergy.com](mailto:pmurphree@peabodyenergy.com) if you have any questions or comments.

Sincerely,

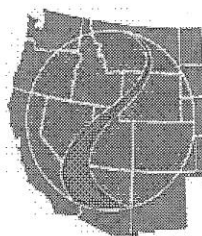
A handwritten signature in black ink, appearing to read "Philip A. Murphree".

Philip A. Murphree  
Senior Hydrologist



Figure A-5. Western Watersheds Project (5 pages).

3/14/2014 4:09 PM FROM: Fax Western Watersheds Project TO: 13077775973 PAGE: 002 OF 006



**Western  
Watersheds  
Project**

Wyoming Office  
PO Box 1160  
Pinedale, WY 82941  
Tel: (877) 746-3628  
Fax: (707) 597-4058  
Email: [Wyoming@WesternWatersheds.org](mailto:Wyoming@WesternWatersheds.org)  
Web site: [www.WesternWatersheds.org](http://www.WesternWatersheds.org)

*Working to protect and restore Western Watersheds*

Lindsay Patterson  
DEQ  
122 West 25th St, Herschler Building  
Cheyenne, WY 82002

March 14, 2014

Dear Lindsay,

WDEQ is proposing to change the designated recreation use from primary to secondary contact recreation for 88% of the total stream miles and 9% of total lake acres, resulting in the application of less-stringent criteria for E. coli bacteria.

Section 101(a)(2) of the CWA states the national goal of achieving "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water" wherever attainable. CWA section 303(c)(2)(A) requires water quality standards to "protect the public health and welfare, enhance the quality of water, and serve the purposes" of the CWA. The EPA's regulation at 40 CFR Part 131 interprets and implements these provisions through a requirement that water quality standards protect the uses specified in section 101(a)(2) (i.e., aquatic life and recreation) unless those uses have been shown to be unattainable. EPA's longstanding interpretation is that the water quality standards regulation establishes a rebuttable presumption that the uses specified in section 101(a)(2) are attainable unless demonstrated otherwise. The mechanism for making such a demonstration is a UAA, defined at 40 CFR § 131.3(g) as "a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g)."

The EPA's water quality standards regulation states in 40 CFR § 131.10(g) that "States may remove a designated use which is not an existing use, as defined in section 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible" based on one of the six factors in 40 CFR § 131.10(g), which are included in Wyoming's Section 33(b).

These rules embody a "rebuttable presumption" that certain uses cannot be removed except under narrowly circumscribed conditions. *63 Fed. Reg. 36,742, 36,749* (July 7, 1998) Fishable and swimmable uses are considered attainable and should apply to a water body unless it is affirmatively demonstrated that such uses are not attainable.

Usually, UAA's are completed on a site-specific basis. However, Section 2.9 of the EPA's Water Quality Standards Handbook<sup>5</sup> discusses the ability of states to conduct

UAAs for groups of waters, sometimes called a categorical UAA. Specifically, the Handbook says “States may also conduct generic use attainability analyses for groups of water body segments provided that the circumstances relating to the segments in question are sufficiently similar to make the results of the generic analyses reasonably applicable to each segment.”

Unfortunately, the GIS process utilized by the DEQ does not affirmatively demonstrate that primary contact is not attainable nor does the DEQ affirmatively demonstrate that primary contact is not an existing use.

As the EPA commented previously: “For example, a stream may have low flow (§ 131.10(g)(2)) that may prevent swimming by adults, but if it is located in an urban area where children could play, ingest, or immerse themselves in the water, that is an indication that low flow may not prevent attainment of the use.”

In addition to the ‘low flow’ issue, the DEQ misconstrues the rebuttable presumption in relation to “access”.

In its Categorical UAA document, the DEQ states “Wyoming has thousands of miles of streams that do not support primary contact recreation because there is not enough water to support immersion (full body contact) activities and there is little potential for children or other members of the public to ingest small quantities of water because the stream is not located near recreation sites or areas frequented by children or the public.”

Assuming these “thousands of miles of streams” mean those being categorically downgraded, the DEQ has provided no evidence whatsoever that primary contact recreation is not an existing use. I have engaged in primary contact recreation on hundreds of streams over the last nearly 40 years across Wyoming that are being categorically downgraded based on the assumption that it is not an existing use. A few examples would be:

1) Sawmill Creek	42.236 110.851
2) Dutch George Creek	42.174 110.463
3) Rock Creek	42.327 110.424
4) Trail Ridge Creek	42.481 110.376
5) Spring Creek	42.491 110.62
6) Apperson Creek	42.704 110.531
7) Nylander Creek	42.833 110.523
8) Slide Creek	43.261 109.736
9) Alpine Creek	43.073 109.537
10) Coon Creek	42.669 109.114
11) Tayo Creek	42.681 109.113
12) Little Sandy	42.196 109.153
13) Sulphur Bar Creek	42.324 108.336
14) Deep Creek	42.45 108.519
15) Black Joe Creek	42.729 109.156
16) Gold Creek	42.446 108.952
17) Mill Creek	42.543 109.047
18) Mill Creek	42.462 108.96
19) Donald Creek	42.758 109.265
20) Hooker Creek	42.86 109.297
21) Rapid Creek	42.716 109.181
22) Clear Creek	42.737 109.191

Next, the DEQ uses the logic that “because the stream is not located near recreation sites or areas frequented by children or the public.” that primary contact recreation is not an existing use and therefore the ‘swimmable’ use can be removed. The DEQ categorizes primary contact as “children and/or the public have easy access to the stream.” but nowhere in the CWA and its implementing regulations is “easy access” a requirement for protection. While there are issues of fenced private with no access, the DEQ does not utilize that, but merely is they are not near a city or developed campground. This is the same myopia that looks at primary/secondary from the perspective of a city dwelling adult not a child. Wyoming has world class recreation opportunities that attract people from all over and only a small fraction of the recreation that occurs does so adjacent to cities and developed campgrounds.

In the DEQ’s categorical UAA document it states “In the third step, the UAA incorporates public feedback received during the August 6 to September 30, 2013 public comment period. Public feedback focused on whether primary contact recreation is an existing use in areas other than those identified in steps one and two. These areas included any pools, deep water areas, or other sites located on “low flow” streams not identified in one of the GIS datasets. Based on the feedback received during the August 6 to September 30, 2013 public comment period, there are not any pools or deep waters areas located on “low flow” streams that are used for primary contact recreation that are not designated for primary contact recreation in the UAA.”

The DEQ sent out a notice to maybe a few hundred people at most, nearly all of whom support the categorical downgrade and yet that lack of ‘feedback’ from those few people is forming the basis for their decision-making. So the DEQ is using the absence of evidence as evidence of absence, which clearly is not a valid assumption on which this rule making can be based.

The DEQ continues “For streams where the UAA indicates that there is not sufficient water availability (low flow conditions) to support primary contact recreation, not sufficient access or recreational opportunity to support primary contact recreation, and public feedback has not indicated that the stream is used for primary contact recreation, primary contact recreation is presumed not to be an existing or attainable use and can be removed.”

As stated above, I, just as one example, have had primary contact recreation in many streams the DEQ has arbitrarily determined “that there is not sufficient water availability (low flow conditions) to support primary contact recreation”. These locations also have sufficient ‘access’ or ‘recreational opportunity’ that has supported primary contact. None of the sites I have listed above or the others I have had primary contact in have had restricted access, unless the DEQ’s definition of ‘access’ is beyond the water cooler.

Section 35 (c) states “All changes to use designations after the effective date of this rule shall include the consideration of credible data relevant to the decision. Changes which involve the removal of a use designation or the replacement of a designation shall be supported by a use attainability analysis (UAA).”

The DEQ did not consider Section 35 “Credible Data” in making the decision to downgrade waters statewide from primary to secondary contact recreation. There is no “credible data” supporting the downgrading of the majority of waters.



Disturbingly, the DEQ reverses the principle of rebuttable presumption when in its request for comments states "Comments containing specific feedback regarding the recreational use of a stream should be accompanied by detailed information such as photos, landowner testimony, mean annual flow, user surveys and also include information to identify the location of the stream (i.e., stream name, latitude, longitude, stream ID number, etc.)." Yet it does not hold itself to this same level when it proposes downgrading most of Wyoming's streams. DEQ reverses the primary until proven secondary by shifting the burden to the public to rebut DEQ's presumption of secondary. This does not comply with the CWA.

WWP does not oppose categorical downgrades on principle. For instance, ephemeral streams could easily be designated through a similar process.

EPA's UAA Guide states "Existing uses, by definition, are attainable and must be designated in water quality standards if they have not already been so designated [40 CFR 131.10(i) and 131.12(a)(1)]." The proposal violates these regulations.

It also states "A UAA is inappropriate whenever: (c) designated uses are existing uses"

Regarding data requirements, the Guide states "A UAA need not, necessarily, require collection of new data. Appropriate existing data can form the basis for a UAA; however, any data used as the basis for attainability arguments must be scientifically defensible, i.e., collected using approved methods including appropriate QA/QC procedures. In addition, the data on which a proposed standards change will be based must appropriately reflect current conditions in the waterbody. It is the Region's position that, in most cases, UAA decisions should be based on a biological, chemical and physical survey that has been conducted on the waterbody in question within the last five years. This, of course, does not rule out reference to older data, but emphasizes that any contemplated standards revision must be based on current information about existing and potential uses for the waterbody."

This was not followed.

Looking at the EPA's UAA Worksheet, it is clear a far more detailed level of site-specific information is needed.

Region 8's policy on this matter is:

With regard to the swimmable component of this national goal, EPA recognizes that the physical characteristics (e.g., depth, flow) of some western waterbodies do not lend themselves to swimming and other forms of primary contact recreation. However, the general Agency policy on this issue is to place emphasis on the potential uses of a waterbody and to do as much as possible to protect the health of the public (see 48 FR 51401 and the Water Quality Standards Handbook at p. 1-6). In certain instances, the public will use whatever waterbodies are available for recreation, regardless of the flow or other physical conditions. Accordingly, EPA encourages States to designate primary contact recreation uses, or at least to require a level of water quality necessary to support primary contact recreation, for all waterbodies with the potential to support primary contact recreation.

The present process does not comply with any of the 4 options laid out in EPA's guidance document.



This Region 8 document also states "For example, in situations where an evaluation of relevant factors indicates that existing and potential primary contact recreation uses cannot reasonably be presumed to exist, it may not be necessary or appropriate to set standards in support of the swimmable goal." The DEQ's process in no way determines that "existing and potential primary contact recreation uses cannot reasonably be presumed to exist".

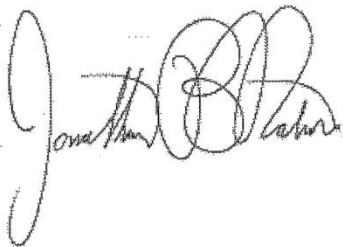
Interestingly, the examples provided at the end of this document likewise do not support the DEQ's decision. The example most closely fitting the current categorical downgraded states:

Example 1: A small headwater mountain stream segment unaffected by human sources of fecal contamination has no known existing recreational uses. Animal sources result in occasional exceedences of the primary contact bacterial criteria, but data are limited. Access to the segment is extremely limited. There would be no treatment costs associated with swimmable goal standards because there are no point sources on the segment. Physical conditions (temperature, flow, depth) are not conducive to swimming (and swimming may be dangerous), but occasional pools of sufficient depth for total body immersion exist.

DECISION: Apply a secondary contact recreation use and a criterion sufficient to support primary contact recreation, with a rebuttable presumption that the indicator shows contamination of human origin.

So even in this case the criterion would still be to protect primary contact. Please review EPA's entire document.

DEQ's approach is insufficient to comply with the letter or intent of the CWA and as such should be rejected.

A handwritten signature in black ink, appearing to read "Jonathan B Ratner". The signature is stylized with large, looping letters.

Jonathan B Ratner  
Director – Wyoming Office

Figure A-6. Niobrara Conservation District (25 pages).



Niobrara Conservation District  
Box 659 - Lusk, WY 82225 - (307) 334-2953

WDEQ/WQD  
Attention: Lindsay Patterson  
Herschler Building 4W  
122 West 25<sup>th</sup> St.  
Cheyenne, WY 82002

March 5, 2014

RECEIVED  
MAR 07 2014

RE: Draft Categorical Use Attainability Analysis for Recreation

The Niobrara Conservation District (NCD) would like to thank the WDEQ for all of the effort that has been put into the development of this UAA. It is a great improvement to the previous system of classification particularly in this low flow region. We appreciate the opportunity to comment and further the accuracy of this document. To that end we have some comments about some individual classifications.

- 1) The Categorical UAA for Recreation, 4.2.2 Established Recreation Areas, page 34 states:  
*Established recreation areas were identified as campgrounds, USFS and BLM recreation sites, natural areas, WYDOT Rest Areas, National Parks and Recreation Areas, and State Parks and Historic Sites. Streams within the boundaries of parks, monuments, or historic sites, or within 0.5 miles of other types of established recreation areas were designated for primary contact recreation, as streams located within these areas may be used for primary contact recreation because they are easily accessible to children and/or members of the public.*

The NCD understands the need for protection of waters within the .5 mile buffer of established recreation areas, including WYDOT Rest Areas, when those waters are flowing streams, visible to the public, accessible from public land and thereby providing opportunities for recreation in those waterbodies. However, many streams within a .5 mile buffer of a WYDOT Rest Area are not visible or accessible from public lands and do not provide opportunities for recreational activity.

The Mule Creek Junction Rest Area, in Niobrara County, was added to the second DRAFT as a recreation area. This resulted in 3 stream segments being classified as "primary recreation due to access" (object ID #'s 11833, 11838 and 11839). The rest area itself is located on public land with the rest area boundary delineated by a 4 strand, barbwire fence with rangeland to the north and east, and HWY 85 and 18 to the west and south. The rest area has composting toilets and plastic grass due to the limited water availability in the area. The rest area does have a small playground and some picnic benches next to the building. There is no advertising of recreational opportunities beyond the boundaries of the rest area.

Of the three stream segments listed, two (Object ID 11833 and 11838) are ephemeral draws that only run water in response to a storm event. Neither of these dry draws is visible from the rest area and both are located on private land, through a 4 strand, barbwire fence. Object ID 11833 is a draw that lays to the northeast of the rest area and is not visible due to topography. Object ID 11838 is a draw across HWY 18, to the south, through the right-of-way fence and again not visible due to topography. Object ID 11839 is an old irrigation ditch no longer in use. This segment lays on private land across HWY 85, to

Niobrara Conservation District Comments: Draft Categorical UAA for Recreation

Page 1

CONSERVATION - DEVELOPMENT - SELF-GOVERNMENT

the west and accessed only by a private road or through a 4 strand, barbwire, right-of-way fence. Again this segment is not visible from the rest area to invite opportunity. We would conclude that none of these three segments could or would be used for recreation activities that would have the risk of ingesting water. We have included photos of the rest area and each segment in relation to the rest area. (Appendix A)

2.) The Categorical UAA for Recreation, 2.3 EPA Guidance on Recreation Use Attainability Analyses, on page 5 states: *The 1992 guidance outlines that "In the case of potential uses, the decision must be based on consideration of a variety of factors affecting potential (e.g., access, flow, depth)" (EPA 1992). The 2004 guidance states that "less than 'swimmable' standards may be considered, for example, where flowing or pooled water is not present within a waterbody during the months when primary contact recreation would otherwise take place and the waterbody is not in close proximity to residential areas, thereby indicating that primary contact uses are not likely to occur. Also, if a state or authorized tribe can demonstrate that natural, ephemeral, intermittent, or low flow condition or water levels prevent attainment of the primary contact recreation use, a secondary contact recreation use may be appropriate" (EPA 2004).*

3.3.2 Mean Annual Flows of Streams Not Supporting Primary Contact Recreation, pg 15, states: *It is important to note, however, that while using EROM mean annual flows is appropriate for identifying streams that do not have sufficient flow to support primary contact recreation at a statewide scale, there are likely streams with mean annual flows of 6 cfs or greater that also do not have sufficient flow to support primary contact recreation. For these streams, site-specific information should be collected to demonstrate that there is not sufficient flow and/or depth to support primary contact recreation, even though the EROM mean annual flow is 6 cfs or greater. In addition to demonstrating that there is not sufficient flow and/or depth to support primary contact recreation, a site-specific UAA would also need to show that the stream is not used for or likely to be used for primary contact recreation.*

The Categorical UAA map shows Snyder Creek, in northern Niobrara County, with a 3.09 mile segment that is listed as primary recreation due to flow. Based on the EROM the flow in this segment ranges from 6.357 cfs at the Cheyenne River confluence to 6.044 cfs at the most upstream point of the segment.

This stream segment is located on private rangeland approximately 26 miles from the closest recreation area, Mule Creek Junction Rest Area. The closest population centers are; Edgemont SD, 48 miles away, Newcastle WY, 60 miles away and Lusk WY, 70 miles away. This area is sparsely populated with individual ranches. Access to the stream segment is on approximately 20 miles of gravel county road and over 2 miles of dirt county road. The last segment of county road has a stream crossing of the Cheyenne River which is impassable at high flows. (Appendix B)

Snyder Creek is an ephemeral stream that flows only in response to significant storm events in the immediate area. The resulting flows are very flashy and short lived. The soil types in the area show runoff as medium to very rapid supporting this type of flow regime. (Appendix C)

The Niobrara Conservation District has attempted to collect water samples in conjunction with our Baseline Water Sampling Project since 2001. In that time frame we have collected 2 water samples from Snyder Creek when it was flowing and accessible (able to cross the Cheyenne River). Those samples were collected in 2002 with recorded flows of 2.64 cfs on 8/6 and 10.38 cfs on 8/26. The creek was dry until the Aug 6<sup>th</sup> flow and was standing water by Sept 4<sup>th</sup>. All other observations have been of a dry



streambed or isolated pools. These observations would indicate a lack of flow for much of the season and that when Snyder Creek does flow, the flows are very flashy and of a short duration. (Appendix D)

In September 2001 the Niobrara Conservation District photographed segments of Snyder Creek from the Cheyenne River confluence upstream for approximately 3.5 miles. The resulting photographs show a densely, well vegetated streambed. The streambed itself supports a vigorous sedge community; the photos show areas of sagebrush encroachment along the stream banks, indicating a drier vegetative community along the banks. Although EROM may show a mean annual flow of greater than 6 cfs there obviously is not a base flow to maintain any kind of substrate free of vegetation. More recent photos taken near the Cheyenne River confluence show the maintenance of these communities. (Appendix E)

So it would seem apparent that although Snyder Creek may show a mean annual flow of greater than 6 cfs the flows come in such a manner as to not support recreational activities. The limited access to Snyder Creek also does not support recreational use. Snyder Creek is on private land, miles from any recreation area or population center and is cut off from access during high flows when the stream is the most likely to flow. These factors make the probability of Snyder Creek being used for recreational purposes nonexistent. Due to all of these factors we would suggest that Snyder Creek does not support a primary recreation designation and should be changed to a secondary recreation classification.

We thank the WDEQ for the opportunity to have input in the process to develop this UAA. We appreciate the opportunity to comment on the resulting document. We hope you will consider these changes to result in a more accurate document upon completion.

Sincerely,

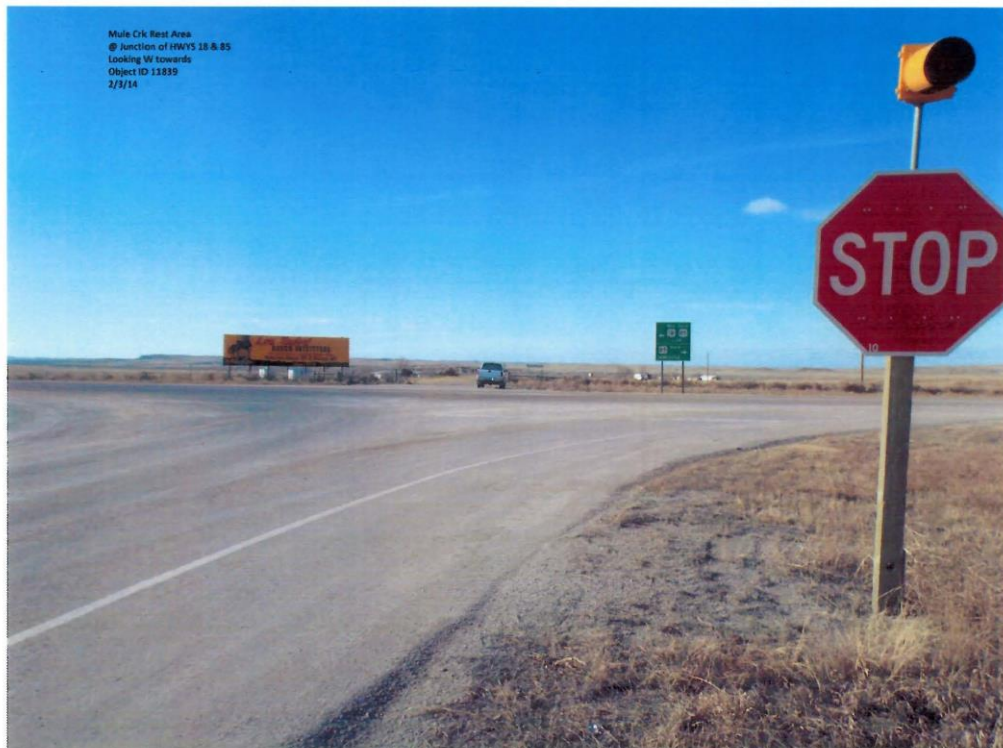
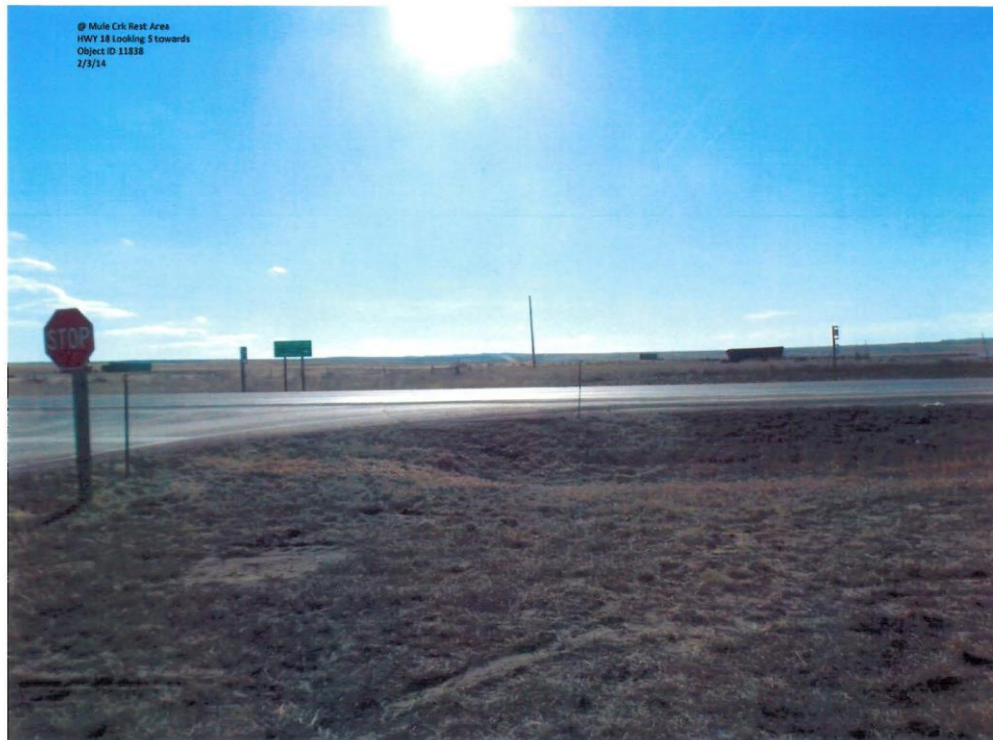


Kevin Gaukel  
Chairman  
Niobrara Conservation District

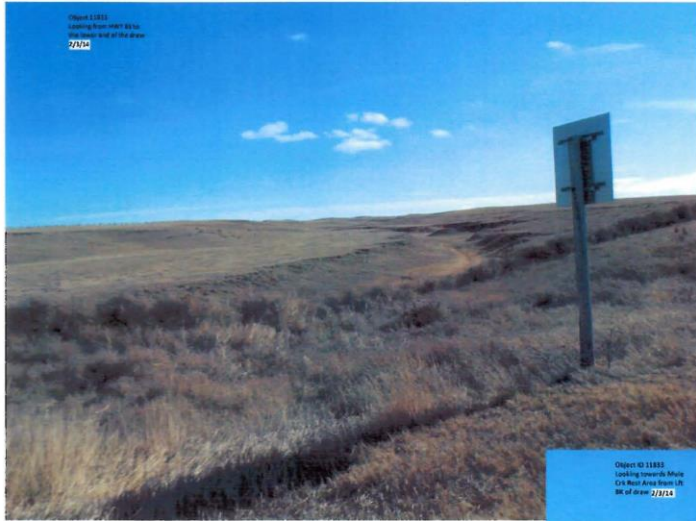
## Appendix A

### Mule Creek Junction Rest Area

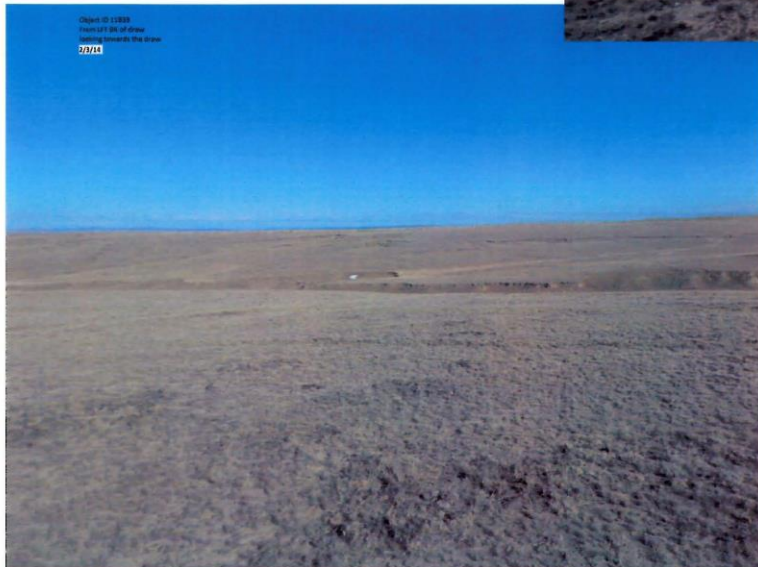








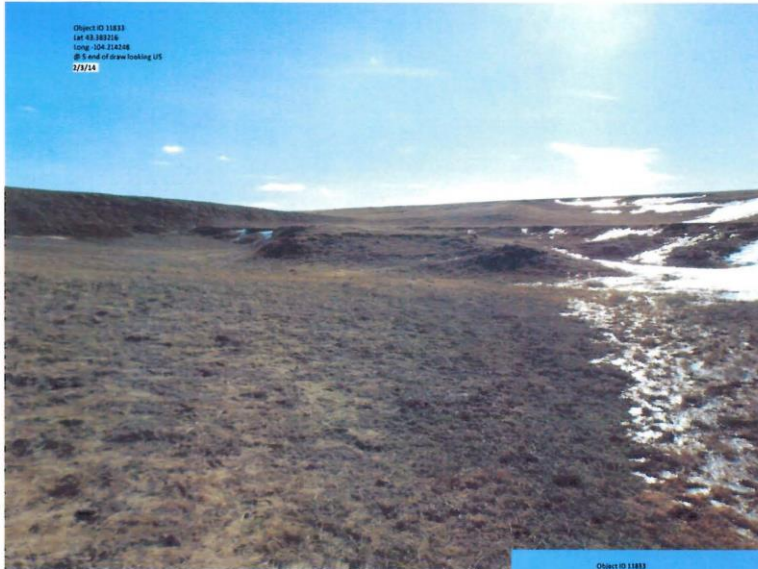
Object ID 11833



NCD Comments: Draft Categorical UAA for Recreation, Appendix A

Page 3

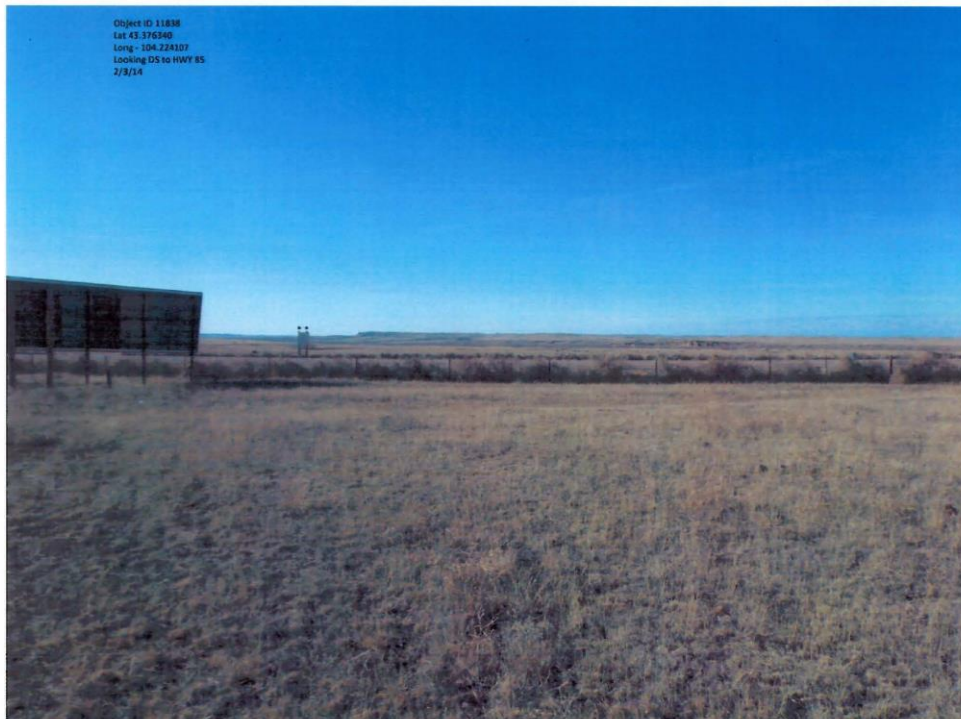




NCD Comments: Draft Categorical UAA for Recreation, Appendix A

Page 4

## Object ID 11838



NCD Comments: Draft Categorical UAA for Recreation, Appendix A

Page 5





## Object ID 11839



NCD Comments: Draft Categorical UAA for Recreation, Appendix A

Page 7



## Appendix B



## Appendix C

### Niobrara Conservation District Baseline Stream Sampling Project 2001

#### **Sampling Site:** Snyder Creek (SC)

#### **Reach Description:**

Snyder Creek originates in the northwest part of the county and flows to the Cheyenne River. There are approximately 34.23 stream miles with a sinuosity of 1.38. The segment monitored is located at the confluence of the Cheyenne River, HUC Code 10120103, 12.6 miles below the South Snyder Creek confluence.

The soil type in the channel at the site is Haverdad-Clarkelen complex. For this complex the runoff is very slow and the hazard of water erosion is slight. Upstream of the site the channel is Haverdad loam which shows the same runoff and erosion hazard. The predominant soils of the site area are Haverdad loam and Ustic Torriorthents. The Ustic Torriorthents go from the stream edge into the uplands. No single profile of these soils is typical. Commonly the surface is pale brown loam to clay loam and the underlying material is light brownish gray loam to clay loam. The permeability is moderate to slow with runoff rapid, and the hazard of water erosion severe. The upland in this area shows a combination of Taluce-Rock outcrop-Shingle complex and Keeline-Kishona association. The Taluce-Rock outcrop-Shingle complex is derived from shale and sandstone. The soils show a rapid runoff with the hazard of water erosion severe in these areas. The Keeline-Kishona soils are derived from various sources. These show a very slow to medium runoff with the hazard of water erosion being slight to moderate.

Further upstream of this area we see an array of soil types with no one dominant. Along the stream corridor we see Forkwood-Cambria loams and Forkwood-Cambria-Cushman loams dominant. These soils are derived from sedimentary rock. They show medium runoff with the hazard of erosion from water being moderate. In the uplands of this area we see Shingle-Rock outcrop-Samday complex and Kishona-Cambria-Theedle loams. The Shingle-Rock outcrop-Samday complex is derived from mostly shale and some sandstone. The runoff is very rapid with the hazard of erosion from water severe. The Kishona-Cambria-Theedle loams are derived from predominantly sedimentary rock. These soils show a medium runoff with the hazard of erosion moderate.

The bedrock geology for this area is the Lance Formation. This formation changes to the Fort Union Formation in the upper part of this watershed. The Lance Formation is a white to yellowish-gray and brown fine- to medium-grained sandstone interbedded with gray and black claystone containing thin beds of carbonaceous shale and coal. The Fort Union Formation is light to yellowish-gray fine to medium grained sandstone interbedded with gray shale containing thin beds of coal.

From the Cheyenne River confluence, upstream there is a corridor of mature cottonwood trees lining the channel on the upper terrace. This gives way to high, steep, sandstone cliffs as you move upstream. The surrounding area is prairie grassland used predominantly for livestock grazing and oil drilling, with secondary uses of wildlife and dinosaur exploration. WYDEQ has no NPDES permits listed on this creek on their website.

**Assessed by:** Heidi Sturman and Lisa Shaw



## **Historical Data**

### **Description of Data and References:**

Ground-Water Resources and Geology of Niobrara County Wyoming, Geological Survey  
Water-Supply Paper 1788

Niobrara County Soil Survey

Topographic Maps

Western Regional Climate Center - Website

Wyoming State Geologic Map

WYDEQ Website

## Appendix D

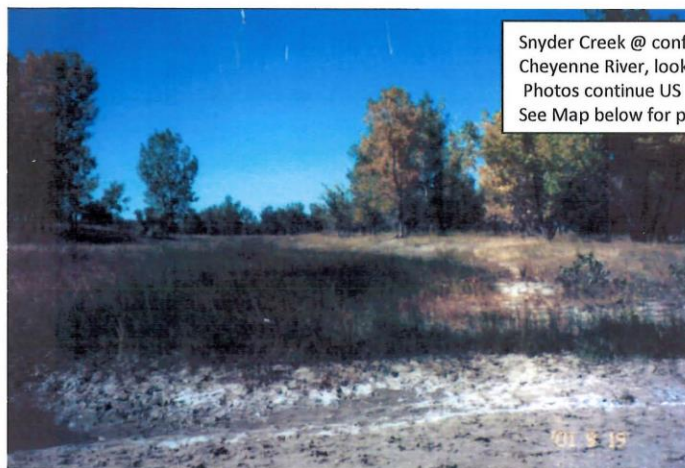
Snyder Creek					Field Parameters										Lab Parameters													
Year	Site	Sample #	Month-Yr	Day	Time	Temp. C	Cond uS	D.O. Mg/L	pH	Discharge	Turbidity	TSS Mg/L	TDSS mg/L	Hardness	T. Phos Mg	Nitrates M	Alkalinity	Chlorides	Sulfates M	Ca mg/l	Mg mg/l	Na mg/l	SAR	Bicarbena	Carbonate	Flow	Comments	
Wyoming Numeric Standards						6600 uS		5 mg/l	6.5 - 9.0							10 mg/l		860 mg/l										
Guidelines						mg m3 max				<15 NTU inc.				150-300 mg/L	< 1 mg/l	min. 20 mg/l	200 mg/l			Aq. Use								
2001																												
	SC		Sep-01	19	Dry																							
	SC		Oct-01	24	Dry																							
2002																												
	SC		Apr-02	15	Standing Water																							
	SC		May-02	20	Standing Water																							
	SC		Jun-02	3	Standing Water																							
	SC		Jun-02	16	Dry																							
	SC		Jul-02	1	Dry																							
	SC	02-219-255	Aug-02	6	1120	22.99	397	4.92	7.87	2.64	1011	1710	312	200	0.88	0.42	81	1.4	102	49.1	18.7	47.7	1.47		SE	8/5 rec'd 2" of rain		
	SC	02-238-355	Aug-02	26	1250	24.28	564	6.91	7.87	10.38	136.4	90	425	132	ND	ND	131	2.8	156	36.2	10.2	79.1	2.99	159	SE	8/21 rec'd 3/4" of rain		
	SC		Sep-02	4	Standing Water																							
	SC		Oct-02	9	Standing Water																							
2003																												
	SC		Apr-03	7	Standing Water																							
	SC		Apr-03	17	Standing Water																							
	SC		May-03	19	Standing Water																							
	SC		Jun-03	3	Standing Water																							
	SC		Jun-03	18	Standing Water																							
	SC		Jun-03	24	Standing Water																							
	SC		Sep-03	2	Dry																							
	SC		Oct-03	20	Dry																							
2004																												
	SC		Apr-04	5	DRY																							
	SC		Jun-04	1	DRY																							
2005																												
	SC		Apr-05	11	DRY																							
	SC		May-05	4	DRY																							
	SC		May-05	12	Isolated Pools																							
	SC		May-05	31	Isolated Pools - area received .75" rain in the last 24-36 hrs.																							
	SC		Jun-05	14	Isolated Pools																							
	SC		Jul-05	5	DRY																							
	SC		Oct-05		DRY																							
2006																												
	SC		May-06	1	DRY																							
	SC		Aug-06	7	DRY																							
	SC		Oct-06		DRY																							
2007																												
	SC		Jun-07	18	Isolated pools at confluence.																							
	SC		Jul-07		Landowner Report DRY																							
	SC		Oct-07	31	DRY																							
2008																												
	SC		May-08	6	DRY																							
	SC		Jun-08	3	Inaccessible																							
	SC		Jun-08	17	Isolated Pools																							
	SC		Jul-08	7	DRY																							
	SC		Oct-08	20	DRY																							

Snyder Creek					Lab Parameters																						
Year	Site	Sample #	Month-Yr	Day	Time	Temp. C	Cond uS	D.O. Mg/L	pH	Discharge	Turbidity NTU	TSS Mg/L	TDS mg/L	Hardness	T.Phos Mg	Nitrates M	Alkalinity	Chlorides	Sulfates M	Ca mg/l	Mg mg/l	Na mg/l	SAR	Bicarbonate	Carbonate	Flow	Comments
	Wyoming	Numeric	Standards					5 mg/l	6.5 - 9.0		<15 NTU inc.				150-300µs < 1mg/l	10 mg/l	min. 20 mg/l	860 mg/l	200 mg/l								
	Guidelines						6500 uS																				
							mg (0) meq/l								>300µs hard												
2009																											
	SC		May-09	17		DRY																					
	SC		Jul-09	6		Grassy Channel, no flowing water																					
	SC		Aug-09	31		DRY																					
	SC		Oct-09	6		DRY																					
2010																											
	SC		May-10	4		DRY																					
	SC		Jun-10	21		Standing water, area received rain over the weekend																					
	SC		Jul-10	6		Isolated Pools																					
	SC		Sep-10	9		DRY																					
2011																											
	SC		May-11	2		Isolated pools																					
	SC		May-11	31		Isolated pools																					
	SC		Jul-11			DRY																					
	SC		Sep-11			DRY																					
2012																											
	SC		Apr-12	3		Standing water																					
	SC		Jun-12	4		Isolated Pools																					
	SC		Oct-12	9		Dry Channel																					
2013																											
	SC		Apr-13	2		Dry Channel																					
	SC		Jun-13	4		Dry Channel																					
	SC		Jul-13	8		Dry Channel - ground wet from rain over weekend																					
	SC		Aug-13	6		Could not get to Snyder Crk due to high flows in CR																					
	SC		Sep-13	3		No flowing water																					
	SC		Nov-13	4		A lot of standing water signs of beaver activity. The Cheyenne River appears to be backed up into Snyder from beaver activity Could not see the dam. Beaver activity very evident.																					



## Appendix E

(Photos were taken from DS to US)

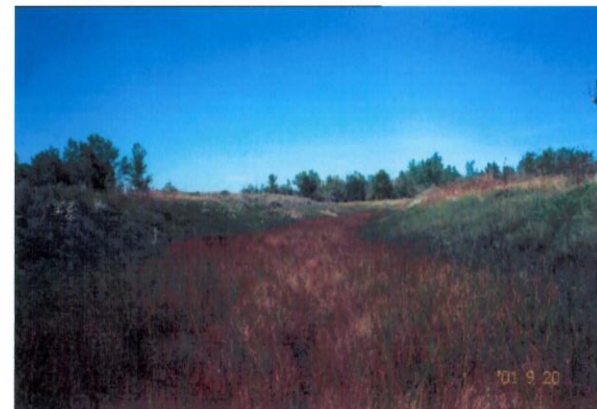


Snyder Creek @ confluence of  
Cheyenne River, looking US  
Photos continue US  
See Map below for photo points.

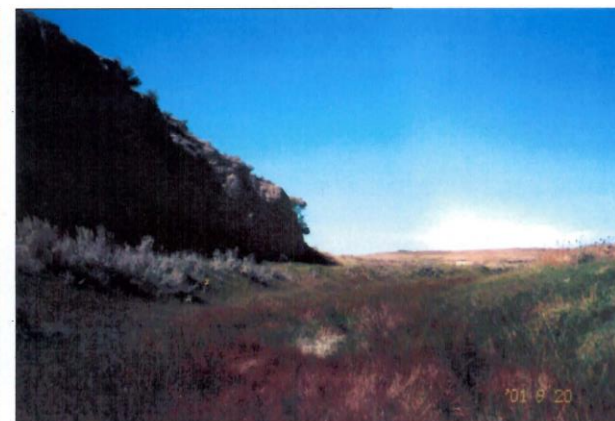
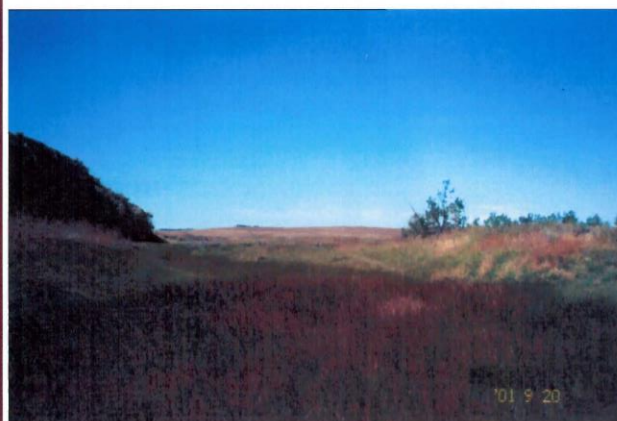
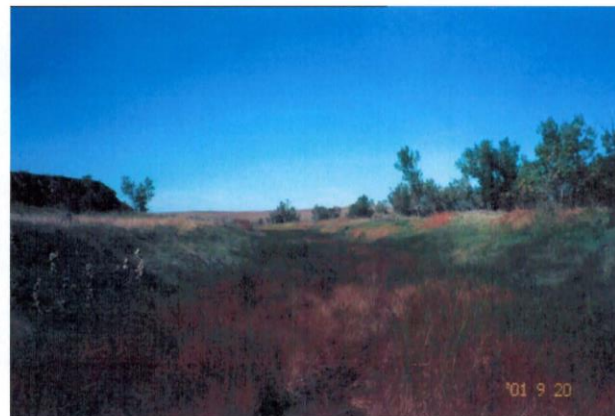


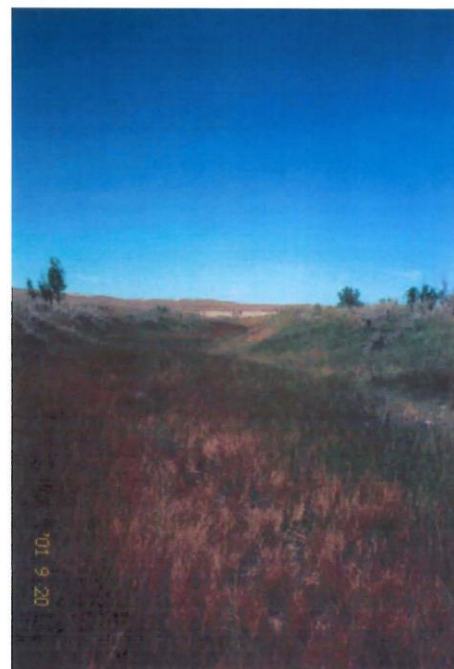
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## Upstream Photo Points on Map



NCD Comments: Draft Categorical UAA for Recreation, Appendix E

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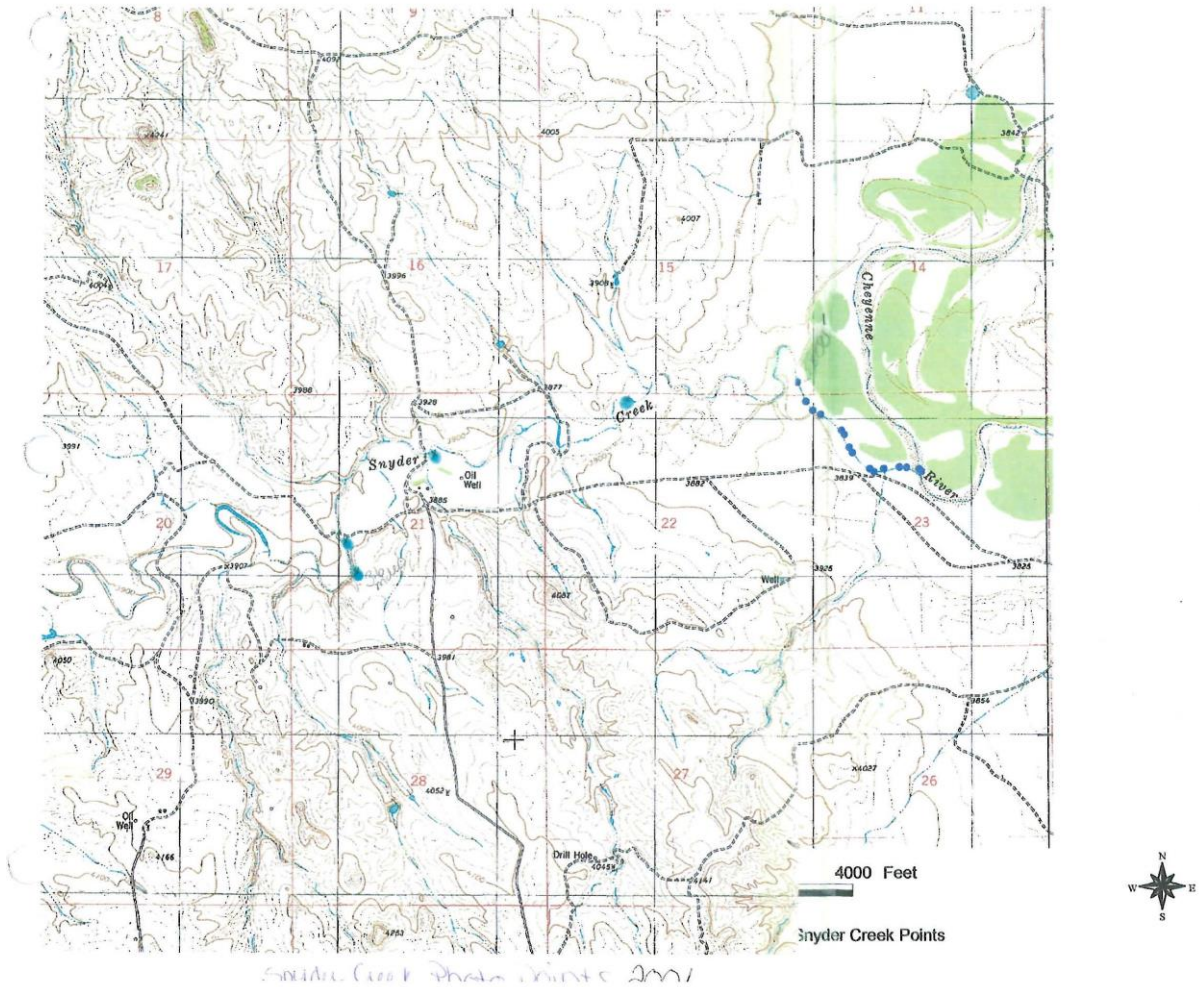
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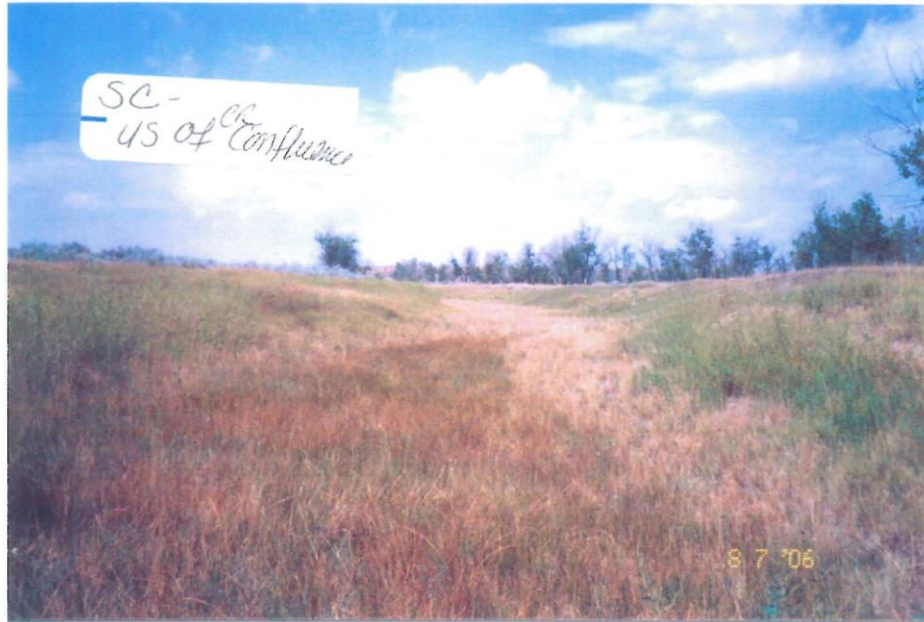
NCD Comments: Draft Categorical UAA for Recreation, Appendix E

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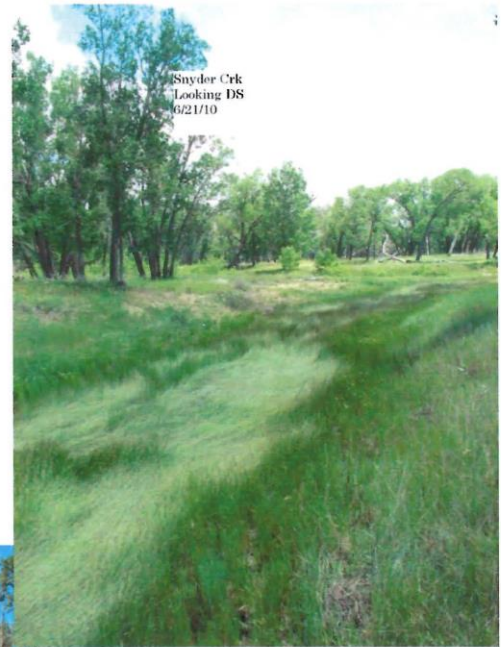
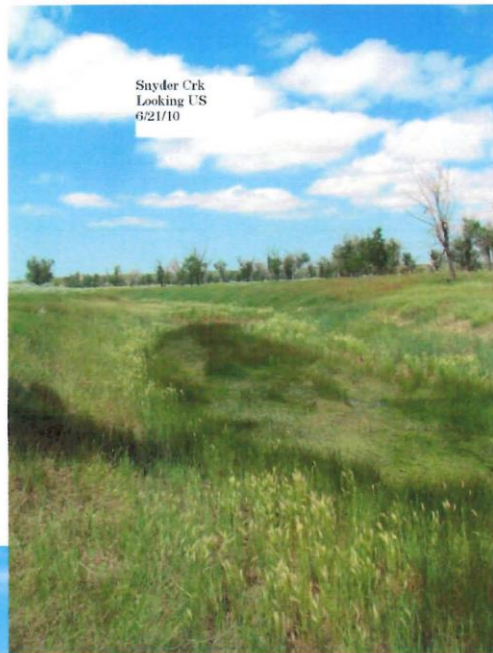


## Photo Points from 9/2001









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